

09/200791

536/024.100; 935/006.000; 935/034.000; 935/059.000;  
935/062.000

NCL NCLM: 514/044.000

NCLS: 424/001.110; 424/001.490; 424/001.610; 424/001.650;  
424/001.690; 424/093.200; 424/093.210; 424/450.000;  
435/069.100; 435/069.500; 435/320.100; 536/024.100

(FILE 'CAPLUS, MEDLINE, BIOSIS, EMBASE, LIFESCI, WPIDS, CONFSCI,  
SCISEARCH, JICST-EPLUS, USPATFULL' ENTERED AT 10:30:16 ON 09 MAY  
2000)

L37 546 S BEHR T?/AU

L38 3233 S GOLDENBERG D?/AU

L39 240 S L37 AND L38

L40 245 S (L39 OR L37 OR L38) AND (RENAL? OR KIDNEY)

L41 31 S L40 AND (L3 OR (D OR L) (W) (LYSINE OR LYS))

L42 11 DUP REM L41 (20 DUPLICATES REMOVED)

L42 ANSWER 1 OF 11 CAPLUS COPYRIGHT 2000 ACS DUPLICATE 1

ACCESSION NUMBER: 1999:368541 CAPLUS

DOCUMENT NUMBER: 131:155360

TITLE: Higher-linear energy transfer (LET) .alpha.  
versus low-LET .beta. emitters in  
radioimmunotherapy of solid tumors: therapeutic  
efficacy and dose-limiting toxicity of 213Bi-  
versus 90Y-labeled CO17-1A fab' fragments in a  
human colonic cancer model

AUTHOR(S): Behr, Thomas M.; Behe, Martin; Stabin,  
Michael G.; Wehrmann, Eike; Apostolidis,  
Christos; Molinet, Roger; Strutz, Frank;  
Fayyazi, Afshin; Wieland, Eberhard; Gratz,  
Stefan; Koch, Lothar; Goldenberg, David  
M.; Becker, Wolfgang

CORPORATE SOURCE: Departments of Nuclear Medicine,  
Georg-August-University, Gottingen, D-37075,  
Germany

SOURCE: Cancer Res. (1999), 59(11), 2635-2643  
CODEN: CNREA8; ISSN: 0008-5472

PUBLISHER: AACR Subscription Office

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Recent studies suggest that radioimmunotherapy (RIT) with  
high-linear energy transfer (LET) radiation may have therapeutic  
advantages over conventional low-LET (e.g., .beta.-) emissions.  
Furthermore, fragments may be more effective in controlling tumor  
growth than complete IgG. However, to the best of our knowledge, no  
investigators have attempted a direct comparison of the therapeutic  
efficacy and toxicity of a systemic targeted therapeutic strategy,  
using high-LET .alpha. vs. low-LET .beta. emitters in vivo. The aim  
of this study was, therefore, to assess the toxicity and antitumor

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efficacy of RIT with the .alpha. emitter 213Bi/213Po, as compared to the .beta. emitter 90Y, linked to a monovalent Fab' fragment in a human colonic cancer xenograft model in nude mice. Biodistribution studies of 213Bi- or 88Y-labeled benzyl-diethylene-triamine-pentaacetate-conjugated Fab' fragments of the murine monoclonal antibody CO17-1A were performed in nude mice bearing s.c. human colon cancer xenografts. 213Bi was readily obtained from an "inhouse" 225Ac/213Bi generator. It decays by .beta.- and 440-keV .gamma. emission, with a t1/2 of 45.6 min, as compared to the ultra-short-lived .alpha. emitter, 213Po (t1/2 = 4.2 .mu.s). For therapy, the mice were injected either with 213Bi- or 90Y-labeled CO17-1A Fab', whereas control groups were left untreated or were given a radiolabeled irrelevant control antibody. The max. tolerated dose (MTD) of each agent was detd. The mice were treated with or without inhibition of the renal accretion of antibody fragments by D-lysine, bone marrow transplantation, or combinations thereof. Myelotoxicity and potential second-organ toxicities, as well as tumor growth, were monitored at weekly intervals. Addnl., the therapeutic efficacy of both 213Bi- and 90Y-labeled CO17-1A Fab' was compared in a GW-39 model metastatic to the liver of nude mice. In accordance with kidney uptake values of as high as .gtoreq.80% of the injected dose per g, the kidney was the first dose-limiting organ using both 90Y- and 213Bi-labeled Fab' fragments. Application of D-lysine decreased the renal dose by >3-fold. Accordingly, myelotoxicity became dose limiting with both conjugates. By using lysine protection, the MTD of 90Y-Fab' was 250 .mu.Ci and the MTD of 213Bi-Fab' was 700 .mu.Ci, corresponding to blood doses of 5-8 Gy. Addnl. bone marrow transplantation allowed for an increase of the MTD of 90Y-Fab' to 400 .mu.Ci and for 213Bi-Fab' to 1100 .mu.Ci, resp. At these very dose levels, no biochem. or histol. evidence of renal damage was obsd. (kidney doses of <35 Gy). At equitoxic dosing, 213Bi-labeled Fab' fragments were significantly more effective than the resp. 90Y-labeled conjugates. In the metastatic model, all untreated controls died from rapidly progressing hepatic metastases at 6-8 wk after tumor inoculation, whereas a histol. confirmed cure was obsd. in 95% of those animals treated with 700 .mu.Ci of 213Bi-Fab' 10 days after model induction, which is in contrast to an only 20% cure rate in mice treated with 250 .mu.Ci of 90Y-Fab'. These data show that RIT with .alpha. emitters may be therapeutically more effective than conventional .beta. emitters. Surprisingly, max. tolerated blood doses were, at 5-8 Gy, very similar between high-LET .alpha. and low-LET .beta. emitters. Due to its short phys. half-life, 213Bi appears to be esp. suitable for use in conjunction with fast-clearing fragments.

L42 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2000 ACS

ACCESSION NUMBER: 2000:226245 CAPLUS

Searcher : Shears 308-4994

09/200791

**TITLE:** 90Y dosimetry in the nude mouse: evaluation of three dosimetry models in relation to the observed biological effects in the radioimmunotherapy of human colon cancer xenografts

**AUTHOR(S):** Behr, T. M.; Sgouros, G.; Sharkey, R. M.; Dunn, R. M.; Blumenthal, R. D.; Kolbert, K.; Juweid, M. E.; Siegel, J. A.; Goldenberg, D. M.

**CORPORATE SOURCE:** Garden State Cancer Center at the Center for Molecular Medicine and Immunology, Newark, NJ, 07103, USA

**SOURCE:** Int. Radiopharm. Dosim. Symp., Proc. Conf., 6th (1999), Volume 1, 257-271. Editor(s): Schlafke-Stelson, Audrey T.; Stabin, Michael G.; Sparks, Richard B. National Technical Information Service: Springfield, Va. CODEN: 68TXAO

**DOCUMENT TYPE:** Conference

**LANGUAGE:** English

**AB** Due to the long path length of high-energy .beta.-emitters, cross-organ radiation may become an important issue in small animal models. The aim of this study, therefore, was to evaluate three different dosimetry models in relation to obsd. biol. effects in radioimmunotherapy (RAIT) with 90Y-labeled immunoconjugates (IgG, F(ab)2 and Fab) in nude mice. The max. tolerated dose (MTD) of the 90Y-labeled anti-CEA MAb MN-14 (Fab, F(ab)2, and IgG), as well as the dose-limiting organ toxicities were detd. in GW-39 colon cancer xenografted nude mice (s.c. or metastatic). The mice were treated without artificial support, with inhibition of the renal uptake of antibody fragments by D-lysine (1,2), with bone marrow transplantation (BMT), or with combinations of each. Blood counts, kidney and liver function parameters, histol., and tumor growth were monitored. The 90Y dosimetry was calcd. based on three different model assumptions: 1) taking only self-doses into account, using S factors for spheres (3); 2) correcting for cross-organ irradiation according to the model of Hui et al. (4); and 3) using actual mouse anatomy as represented by magnetic resonance imaging (MRI) with a three-dimensional internal dosimetry package (3D-ID) developed by Sgouros et al. (5). Self-doses of Model 1 were not sufficient to describe the obsd. biol. effects, esp. near organs with a high activity accretion. With Fab, rising liver enzymes were obsd. at injected activities .gtoreq. 12 MBq, not explained by a self-dose of 4.3 Gy. Model 2 shows crossfire from the kidneys, resulting in an av. liver dose of 2.45 Gy/MBq. With F(ab)2 fragments, only the combination of BMT and lysine increased the MTD, explained by cross-organ radiation from the kidneys to the red marrow of the lumbar spine, described only by Model 3 (marrow self-dose

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.ltoreq. 5 Gy, crossfire up to 0.8 Gy/MBq). Antitumor effects correlated well with calcd. doses. These data show that for understanding the biol. effects of 90Y in a mouse model, accounting for cross-organ irradiation is mandatory. The best correlation between biol. effects and the dosimetry was obtained by the third, MRI-anatomy-based model, which also allows the description of crossfire from abdominal organs to the red marrow.

L42 ANSWER 3 OF 11 USPATFULL

ACCESSION NUMBER: 1998:150898 USPATFULL  
TITLE: Methods for reduced renal uptake of antibody fragments  
INVENTOR(S): Behr, Thomas M., Bloomfield, NJ, United States  
Goldenberg, David M., Mendham, NJ, United States  
PATENT ASSIGNEE(S): Center for Molecular Medicine and Immunology, Belleville, NJ, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5843894	19981201
APPLICATION INFO.:	US 1995-407899	19950321 (8)
DOCUMENT TYPE:	Utility	
PRIMARY EXAMINER:	Huff, Sheela	
ASSISTANT EXAMINER:	Reeves, Julie E.	
LEGAL REPRESENTATIVE:	Foley & Lardner	
NUMBER OF CLAIMS:	12	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	11 Drawing Figure(s); 7 Drawing Page(s)	
LINE COUNT:	825	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Kidney uptake of antibody fragment conjugates in patients is reduced by administration to the patient of one or more compounds selected from the group consisting of D-lysine, poly-D-lysine, or poly-L-lysine, or pharmaceutically acceptable salts or carboxyl derivatives thereof.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L42 ANSWER 4 OF 11 CAPLUS COPYRIGHT 2000 ACS DUPLICATE 2

ACCESSION NUMBER: 1998:491847 CAPLUS  
DOCUMENT NUMBER: 129:257050  
TITLE: Experimental studies on the role of antibody fragments in cancer radio-immunotherapy: influence of radiation dose and dose rate on toxicity and anti-tumor efficacy  
AUTHOR(S): Behr, Thomas M.; Memtsoudis, Stavros;  
Searcher : Shears 308-4994

09/200791

Sharkey, Robert M.; Blumenthal, Rosalyn D.;  
Dunn, Robert M.; Gratz, Stefan; Wieland,  
Eberhard; Nebendahl, Klaus; Schmidberger, Heinz;  
Goldenberg, David M.; Becker, Wolfgang  
CORPORATE SOURCE: Department of Nuclear Medicine,  
Georg-August-University, Gottingen, Germany  
SOURCE: Int. J. Cancer (1998), 77(5), 787-795  
CODEN: IJCNAB; ISSN: 0020-7136  
PUBLISHER: Wiley-Liss, Inc.  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB Whereas bivalent fragments have been widely used for radio-immunotherapy, no systematic study has been published on the therapeutic performance of monovalent conjugates in vivo. The aim of our study was, therefore, to det. the therapeutic performance of <sup>131</sup>I-labeled Fab as compared to bivalent conjugates and to analyze factors that influence dose-limiting organ toxicity and anti-tumor efficacy. The max. tolerated doses (MTDs) and dose-limiting organ toxicities of the <sup>131</sup>I-labeled anti-CEA antibody MN-14 [IgG, F(ab')<sub>2</sub> and Fab] were detd. in nude mice bearing s.c. human colon cancer xenografts. Mice were treated with or without bone marrow transplantation (BMT) or inhibition of the renal accretion of antibody fragments by D-lysine or combinations thereof. Toxicity and tumor growth were monitored. Radiation dosimetry was calcd. from biodistribution data. With all 3 <sup>131</sup>I-labeled immunoconjugates [IgG, F(ab')<sub>2</sub> and Fab], the red marrow was the only dose-limiting organ; MTDs were 260 .mu.Ci for IgG, 1,200 .mu.Ci for F(ab')<sub>2</sub> and 3 .mu.Ci for Fab, corresponding to blood doses of 17 Gy, 9 Gy and 4 Gy, resp. However, initial dose rates were 10 times higher with Fab as compared to IgG and 3 times higher as compared to F(ab')<sub>2</sub>. The MTD of all 3 immunoconjugates was increased by BMT by approx. 30%. In accordance with renal doses below 10 Gy, no signs of nephrotoxicity were obsd. Despite lower absorbed tumor doses, at equitoxic dosing, Fab fragments were more effective at controlling tumor growth than the resp. bivalent fragment or IgG, probably due to higher intratumoral dose rates. Our data indicate that the improved anti-tumor effectiveness of antibody fragments as compared to IgG and the higher myelotoxicity at comparably lower red marrow doses are most likely due to the higher initial dose rates obsd. with antibody fragments.

L42 ANSWER 5 OF 11 CAPLUS COPYRIGHT 2000 ACS DUPLICATE 3  
ACCESSION NUMBER: 1998:678097 CAPLUS  
DOCUMENT NUMBER: 130:49277  
TITLE: <sup>90</sup>Yttrium-Labeled Complementarity-Determining-Region-Grafted Monoclonal Antibodies for Radioimmunotherapy: Radiolabeling and Animal Biodistribution Studies  
Searcher : Shears 308-4994

09/200791

AUTHOR(S) : Govindan, Serengulam V.; Shih, Lisa B.;  
Goldenberg, David M.; Sharkey, Robert  
M.; Karacay, Habibe; Donnelly, Joseph E.;  
Losman, Michele J.; Hansen, Hans J.; Griffiths,  
Gary L.  
CORPORATE SOURCE: Immunomedics Inc., Morris Plains, NJ, 07950, USA  
SOURCE: Bioconjugate Chem. (1998), 9(6), 773-782  
CODEN: BCCHEs; ISSN: 1043-1802  
PUBLISHER: American Chemical Society  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB 90Yttrium-labeled monoclonal antibodies (mAbs) are likely to be important to radioimmunotherapy (RAIT) of a variety of cancers. The goal of this study was to select and evaluate a form of [90Y]mAb suitable for RAIT and det. conditions for high-yield, reproducible radiolabelings. 90Y-Labelings, at 2-40 mCi levels, of cdr-grafted versions of anti-B-cell lymphoma (hLL2) and anti-CEA (hIMMU-14) mAbs were optimized to >90% incorporations using the macrocyclic chelator DOTA as the metal carrier. In in vitro challenge assays, the stability of mAbs labeled with [90Y]DOTA was better than that of the corresponding [90Y]benzyl-DTPA conjugates. The retention of [90Y]DOTA-hLL2 on Raji tumor cells in vitro was similar to that of the same mAb labeled with [90Y]benzyl-DTPA and was about twice as much as with [125I]hLL2, indicating residualization of metalated mAb. Both [90Y]hLL2 conjugates, prepd. using DOTA and Bz-DTPA, had similar max. tolerated doses of 125 .mu.Ci in BALB/c mice and showed no discernible chelator-induced immune responses. Animal biodistribution studies in nude mice bearing Ramos human B-cell lymphoma xenografts revealed similar tumor and tissue uptake over a 10 day period, with the exception of bone uptake which was up to 50% lower for [88Y]DOTA-hLL2 compared to [88Y]Bz-DTPA-hLL2 at time points beyond 24 h. With [90Y]DOTA-hLL2 fragments, in vivo animal tumor dosimetries were inferior to those for the IgG, and kidney uptake was relatively high even with D-lysine administration. The ability of [111In]DOTA-hLL2 to accurately predict [90Y]DOTA-hLL2 biodistribution was established. These preclin. findings demonstrate that [90Y]DOTA-(CDR-grafted) mAbs are suitable for examn. in clin. RAIT.

L42 ANSWER 6 OF 11 CAPLUS COPYRIGHT 2000 ACS DUPLICATE 4

ACCESSION NUMBER: 1998:12681 CAPLUS

DOCUMENT NUMBER: 128:125381

TITLE: Overcoming the nephrotoxicity of  
radiometal-labeled immunoconjugates: improved  
cancer therapy administered to a nude mouse  
model in relation to the internal radiation  
dosimetry

AUTHOR(S) : Behr, Thomas M.; Sharkey, Robert M.;  
Sgouros, George; Blumenthal, Rosalyn D.; Dunn,  
Searcher : Shears 308-4994

09/200791

Robert M.; Kolbert, Katherine; Griffiths, Gary  
L.; Siegel, Jeffry A.; Becker, Wolfgang S.;  
Goldenberg, David M.

CORPORATE SOURCE: Garden State Cancer Center at the Center for  
Molecular Medicine and Immunology, Belleville,  
NJ, 07109, USA  
SOURCE: Cancer (N. Y.) (1997), 80(12, Suppl.), 2591-2610  
CODEN: CANCAR; ISSN: 0008-543X  
PUBLISHER: John Wiley & Sons, Inc.  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB Elevated renal uptake and extended retention of  
radiolabeled antibody fragments and peptides is a problem in the  
therapeutic application of such agents. However, cationic amino  
acids have been shown to reduce renal accretion. The aims  
of the current study were to evaluate whether this methodol. would  
benefit therapy with yttrium 90 (90Y)-labeled antibody fragments  
(Fab, F(ab)2), to establish the relationship between radiation  
dosimetry and obsd. biol. effects, and to compare the antitumor  
efficacy of antibody fragments with that of whole Ig (Ig)G. The  
max. tolerated dose (MTD) and the dose-limiting organ toxicity of  
90Y-labeled anti-carcinoembryonic antigen (CEA) MN-14 monoclonal  
antibodies (Fab, F(ab)2, and IgG) were detd. in nude mice bearing  
GW-39 human colon carcinoma xenografts. The mice were treated with  
or without kidney protection by administration of  
D-lysine, with or without bone marrow  
transplantation (BMT), or with combinations of each. Toxicity and  
tumor growth were monitored at weekly intervals after  
radioimmunotherapy. Dosimetry was calcd. from bio-distribution  
studies using 88Y-labeled antibody. Three different dosimetric  
models were examd.: 1) taking solely self-to-self doses into  
account, using S factors for 90Y in spheroids from 0.1 to 1 g; 2)  
correcting for cross -organ radiation; and 3) using actual mouse  
anatomy as represented by NMR imaging with a three-dimensional  
internal dosimetry package (3D-ID). The kidney was the  
first dose limiting organ with the use of Fab fragments. Acute  
radiation nephritis occurred at injected activities .gtoreq.325  
.mu.Ci, and chronic nephrosis at doses .gtoreq.250 .mu.Ci.  
Activities of 200 .mu.Ci were tolerated by 100% of the animals  
(i.e., the MTD). Application of lysine decreased the renal  
dose by approx. fivefold, facilitating a 25% increase in the MTD (to  
250 .mu.Ci), because myelotoxicity became dose-limiting despite red  
marrow doses of less than 5 Gy (Gy). By using BMT and lysine, the  
MTD could be doubled from 200 to 400 .mu.Ci, where no biochem. or  
histol. evidence of renal damage was obsd. (kidney  
dose, .ltoreq.40 Gy). With injected activities of .gtoreq.  
325.mu.Ci without kidney protection, and with a hepatic  
self-to-self dose of only 4 Gy, rising liver enzymes were obsd.,  
which could be explained only by cross-organ radiation from

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radioactivity in the kidneys (in the immediate neighborhood of the right kidney up to .gtoreq. 150 Gy). The MTD of F(ab)2 fragments could be elevated only by a combination of BMT and lysine. With IgG, the bone marrow alone was dose-limiting. Tumor dosimetry correlated well with antitumor effects; Fab was more effective than F(ab)2, which was consistent with its more favorable dosimetry, and it may also be more effective than IgG due to its higher dose rate and more homogenous distribution. Dosimetry Model 1 was insufficient for predicting biol. effects. Model 2 seemed to be more accurate, accounting for interorgan crossfire. However, Model 3 showed an addnl. substantial contribution to the red bone marrow dose due to crossfire from the abdominal organs. These data show that radiation nephrotoxicity is an important effect of cancer therapy with radiometal-conjugated antibody fragments or peptides. However, this effect can be overcome successfully with the application of cationic amino acids, which substantially increase the anti-tumor efficacy of radiometal-labeled immunoconjugates. For understanding the biol. effects (e.g., liver toxicity) of 90Y in a mouse model, accounting for cross-organ radiation is essential. Further studies with radiometal conjugated monoclonal antibody fragments and peptides are necessary to det. the MTD, dose-limiting organs, antitumor effectiveness, and nephroprotective effects of cationic amino acids in humans.

L42 ANSWER 7 OF 11 CAPLUS COPYRIGHT 2000 ACS DUPLICATE 5  
ACCESSION NUMBER: 1996:681542 CAPLUS  
DOCUMENT NUMBER: 125:317395  
TITLE: Lysine and polylysine for reduced renal uptake of antibody fragments  
INVENTOR(S): Behr, Thomas M.; Goldenberg, David M.  
PATENT ASSIGNEE(S): Center for Molecular Medicine and Immunology, USA  
SOURCE: PCT Int. Appl., 37 pp  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9629087	A1	19960926	WO 1996-US3308	19960320
W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, Searcher : Shears 308-4994				



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GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA,  
GN, ML

US 5843894	A	19981201	US 1995-407899	19950321
CA 2190867	AA	19960926	CA 1996-2190867	19960320
AU 9653616	A1	19961008	AU 1996-53616	19960320
AU 700346	B2	19990107		
EP 767673	A1	19970416	EP 1996-910422	19960320

R: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, MC,  
NL, PT, SE

JP 10505866	T2	19980609	JP 1996-528465	19960320
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PRIORITY APPLN. INFO.:

US 1995-407899	19950321
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WO 1996-US3308	19960320
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AB **Kidney uptake of antibody fragment conjugates in patients undergoing radioimmunodiagnosis, immunotherapy, or radioimmunotherapy is reduced by administration of the patient of one or more compds. selected from the group consisting of lysine and/or polylysine, pharmaceutically acceptable salts or carboxyl derivs. thereof. Human patients undergoing radioimmunodetection with <sup>99m</sup>Tc-labeled Fab' fragments of two anti-carcinoembryonic antigen antibodies were infused over a 3-h period with a com. amino acid soln. contg. 1.75 g L-lysine. A decrease of kidney uptake of radiolabeled fragments was obsd., the effect being more pronounced at 24 h than at 4 h post injection. However, poly(L-lysine) with a mol. wt. of 1-4 kDa reduced kidney uptake with a single i.p. injection at lower doses than the monomer. The potency of poly(L-lysine) increased with increasing mol. wt.**

L42 ANSWER 8 OF 11 CAPLUS COPYRIGHT 2000 ACS

ACCESSION NUMBER: 1996:343819 CAPLUS

DOCUMENT NUMBER: 125:29193

TITLE: Reduction of renal uptake of  
monoclonal antibody fragments by amino acid  
infusion

AUTHOR(S): Behr, Thomas M.; Becker, Wolfgang S.;  
Sharkey, Robert M.; Juweid, Malik E.; Dunn,  
Robert M.; Bair, Hans-J.; Wolf, Friedrich G.;  
Goldenberg, David M.

CORPORATE SOURCE: Garden State Cancer Center, Center for Molecular  
Medicine and Immunology, Newark, NJ, 07103-2763,  
USA

SOURCE: J. Nucl. Med. (1996), 37(5), 829-833  
CODEN: JNMEAQ; ISSN: 0161-5505

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The renal uptake of radiolabeled antibody fragments and peptides presents a problem in radioimmunodetection and therapy, compromising lesion sensitivity, esp. with intracellularly-retained isotopes. Previously, we showed that cationic amino acids and their  
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derivs. are capable of significantly reducing kidney uptake in animals. We report our initial clin. results of successful renal uptake redn. in five patients who underwent cancer radioimmunodetection with <sup>99m</sup>Tc-anti-CEA Fab' fragments. The patients were infused with two liters of a com.-available nutritive amino acid soln. (contg. approx. 2.25 g/L lysine-glutamate and 2.50 g/L arginine), whereas 75 control patients received the same vol. of saline (quantification of organ and tumor kinetics from conjugate whole-body views by ROI technique). The renal uptake in the amino acid group was significantly lower ( $p < 0.05$ ) than in the control group (11.1% injected dose vs. 17.7% injected dose at 24 h postinjection), whereas the uptake of all other organs remained unaffected. Gel filtration chromatog. of the urine taken from amino-acid-treated patients showed that a significantly higher amt. of excreted activity was bound to intact Fab' (53% of excreted activity) in contrast to only less than 10% in the control group. The renal uptake of monoclonal antibody fragments in patients can be reduced significantly by amino acid infusion, even at considerably lower doses than those that were safe and effective in animals. As was found in animals, the mechanism seems to rely on an inhibition of the re-absorption of tubularly-filtered proteins by the proximal tubule cells. These results encourage further clin. trials to lower the renal uptake experienced in radioimmunodetection, as well as in therapeutic trials with antibody fragments and peptides.

L42 ANSWER 9 OF 11 MEDLINE DUPLICATE 6  
ACCESSION NUMBER: 95368640 MEDLINE  
DOCUMENT NUMBER: 95368640  
TITLE: Reduction of the renal uptake of  
radiolabeled monoclonal antibody fragments by  
cationic amino acids and their derivatives.  
AUTHOR: Behr T M; Sharkey R M; Juweid M E;  
Blumenthal R D; Dunn R M; Griffiths G L; Bair H J;  
Wolf F G; Becker W S; Goldenberg D M  
CORPORATE SOURCE: Garden State Cancer Center, Center for Molecular  
Medicine and Immunology, Newark, New Jersey  
07103-2763, USA.  
CONTRACT NUMBER: CA39841 (NCI)  
SOURCE: CANCER RESEARCH, (1995 Sep 1) 55 (17) 3825-34.  
Journal code: CNF. ISSN: 0008-5472.  
PUB. COUNTRY: United States  
Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals; Cancer Journals  
ENTRY MONTH: 199511  
AB The renal uptake of radiolabeled antibody fragments and  
peptides is a problem in radioimmunodetection and  
Searcher : Shears 308-4994

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radioimmunotherapy, especially with intracellular retained radiometals. The aim of this study was to develop suitable methods to reduce this **kidney** uptake. BALB/c mice or nude mice bearing the human GW-39 colon carcinoma xenograft were given i.p. injections of basic amino acids or a range of different basic amino acid derivatives, amino sugars, as well as cationic peptides. The effect of these agents on the biodistribution of Fab' and F(ab')<sub>2</sub> fragments of different mAbs radiolabeled with <sup>99m</sup>Tc, <sup>188</sup>Re, <sup>111</sup>In, <sup>88</sup>Y, or <sup>125</sup>I was studied. Tumor and organ uptake was determined and compared to untreated mice. The **kidney** uptake of Fab' fragments was reduced 5-6-fold in a dose-dependent manner as compared to untreated controls. The uptake in all other organs, as well as the tumor, was unaffected. A similar reduction in **renal** retention was seen for all other intracellularly retained isotopes, as well as for F(ab')<sub>2</sub> fragments. D- and L-isomers of lysine were equally effective whether given i.p. or p.o. D-glucosamine was effective, but its N-acetyl derivative was not. Basic polypeptides (e.g., poly-L-lysine) were also effective; their potency increased with increasing molecular weight. HPLC of the urine taken from treated animals showed the excretion of intact Fab', in contrast to mostly low-molecular-weight metabolites in the control group. These studies indicate that a variety of basic compounds is capable of inhibiting the tubular reabsorption of peptides and proteins, thus lowering the **kidney** uptake of antibody fragments significantly. On a molecular basis, the effect seems to essentially rely on the presence of a positively charged amino group. By reducing **renal** retention of antibody fragments, their role as imaging and therapeutic agents may be expanded.

L42 ANSWER 10 OF 11 CAPLUS COPYRIGHT 2000 ACS

ACCESSION NUMBER: 1995:783642 CAPLUS

DOCUMENT NUMBER: 123:221932

TITLE: Reduction of the **renal** uptake of radiolabeled monoclonal antibody fragments by cationic amino acids and their derivatives

AUTHOR(S): Behr, Thomas M.; Sharkey, Robert M.; Juweid, Malik E.; Blumenthal, Rosalyn D.; Dunn, Robert M.; Griffiths, Gary L.; Bair, Hans-J.; Wolf, Friedrich G.; Becker, Wolfgang S.; Goldenberg, David M.

CORPORATE SOURCE: Garden State Cancer Cent. Cent. Mol. Med. Immunol., Newark, NJ, 07103-2763, USA

SOURCE: Cancer Res. (1995), 55(17), 3824-34  
CODEN: CNREA8; ISSN: 0008-5472

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The **renal** uptake of radiolabeled antibody fragments and peptides is a problem in radioimmunodetection and

Searcher : Shears 308-4994

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radioimmunotherapy, esp. with intracellularly retained radiometals. The aim of this study was to develop suitable methods to reduce this kidney uptake. BALB/c mice or nude mice bearing the human GW-39 colon carcinoma xenograft were given i.p. injections of basic amino acids or a range of different basic amino acid derivs., amino sugars, as well as cationic peptides. The effect of these agents on the biodistribution of Fab' and F(ab')<sub>2</sub> fragments of different mAbs radiolabeled with <sup>99m</sup>Tc, <sup>188</sup>Re, <sup>111</sup>In, <sup>88</sup>Y, or <sup>125</sup>I was studied. Tumor and organ uptake was detd. and compared to untreated mice. The kidney uptake of Fab' fragments was reduced 5-6-fold in a dose-dependent manner as compared to untreated controls. The uptake in all other organs, as well as tumor, was unaffected. A similar redn. in renal retention was seen for all other intracellularly retained isotopes, as well as for F(ab')<sub>2</sub> fragments. D- And L-isomers of lysine were equally effective whether given i.p. or p.o. D-Glucosamine was effective, but its N-acetyl derivs. was not. Basic polypeptides (e.g., poly-L-lysine) were also effective; their potency increased with increasing mol. wt. HPLC of the urine taken from treated animals showed the excretion of intact Fab', in contrast to mostly low-mol.-wt. metabolites in the control group. These studies indicate that a variety of basic compds. is capable of inhibiting the tubular resorption of peptides and proteins, thus lowering the kidney uptake of antibody fragments significantly. On a mol. basis, the effect seems to essentially rely on the presence of a pos. charged amino group. By reducing renal retention of antibody fragments, their role as imaging and therapeutic agents may be expanded.

L42 ANSWER 11 OF 11 BIOSIS COPYRIGHT 2000 BIOSIS

ACCESSION NUMBER: 1995:187844 BIOSIS

DOCUMENT NUMBER: PREV199598202144

TITLE: Reduction of kidney uptake of Fab' fragments of monoclonal antibodies: Animal experiments and initial clinical results.

AUTHOR(S): Behr, T. M.; Sharkey, R. M.; Juweid, M. E.; Aninipot, R.; Goldenberg, D. M.

CORPORATE SOURCE: Garden State Cancer Cent., Newark, NJ 07103 USA

SOURCE: Proceedings of the American Association for Cancer Research Annual Meeting, (1995) Vol. 36, No. 0, pp. 617.

Meeting Info.: Eighty-sixth Annual Meeting of the American Association for Cancer Research Toronto, Ontario, Canada March 18-22, 1995

ISSN: 0197-016X.

DOCUMENT TYPE: Conference

LANGUAGE: English

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Searcher : Shears 308-4994

liver activity appreciably.

L11 ANSWER 16 OF 19 JICST-EPlus COPYRIGHT 2000 JST

ACCESSION NUMBER: 940939922 JICST-EPlus  
 TITLE: Reabsorption of proteins in renal tubules.  
 AUTHOR: KUDO SHOJI; GOTO HIROHIKO; ODOMI MASAOKI  
 CORPORATE SOURCE: Otsuka Pharm. Co., Ltd., Tokushima Res. Inst.  
 SOURCE: Yakubutsu Dotai (Xenobiotic Metabolism and Disposition), (1994) vol. 9, no. Suppl, pp. S114-S117. Journal Code: X0758A (Fig. 1, Tbl. 1, Ref. 4)  
 CODEN: YADOEL; ISSN: 0916-1139  
 PUB. COUNTRY: Japan  
 DOCUMENT TYPE: Journal; Article  
 LANGUAGE: Japanese  
 STATUS: New

AB In order to investigate the mechanism of the reabsorption of a protein in renal tubules of rats, we employed OCT-7000, which is a recombinant variant of natural human interleukin-1.ALPHA. with a molecular mass of approximately 18,000. In this study, OCT-7000 uptake in renal tubules was examined using immunoelectron microscopic technique with immunogold staining. The effects of various proteins or synthetic polypeptides on the urinary excretion of OCT-7000 were also investigated. Immunoelectron microscopic observations showed that OCT-7000 was taken up into the endocytic vesicle close to the brush border membrane located in segment 2 of the proximal tubules, followed by accumulation of secondary lysosomes. Urinary excretion of OCT-7000 after systemic administration was extremely low, accounting for 0.014% of the dose. Human serum albumin had no effect on the excretion of OCT-7000, while increases in the urinary excretion of OCT-7000 were found in rats treated with a trypsin inhibitor, myoglobin and trypsinogen, in a dose-dependent manner. The order of potency for urinary excretion of OCT-7000 was trypsinogen>myoglobin>trypsin inhibitor. Poly-L-lysine, a synthetic polypeptide dose-dependently increased the urinary excretion of OCT-7000, whereas poly-L-glutamic acid had no effect on excretion. Specifically, the data reveal that reabsorption of OCT-7000 in the proximal tubules was inhibited by trypsinogen, myoglobin, trypsin inhibitor or poly-L-lysine, resulting in an increase of urinary excretion of OCT-7000. Furthermore, it was considered that negative charges on the brush border membrane in the proximal tubules were involved in the reabsorption of OCT-7000 because the inhibitory potency of proteins or synthetic polypeptides on the reabsorption of OCT-7000 was increased with a high isoelectric point. From the above, the mechanisms of reabsorption of protein in renal tubule are speculated as follows. (abridged author abst.)

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L11 ANSWER 17 OF 19 MEDLINE

DUPLICATE 10

ACCESSION NUMBER: 93160295 MEDLINE

DOCUMENT NUMBER: 93160295

TITLE: Copolymers of lysine and polyethylene glycol: a new family of functionalized drug carriers [published erratum appears in Bioconjug Chem 1993 Sep-Oct;4(5):410].

AUTHOR: Nathan A; Zalipsky S; Ertel S I; Agathos S N; Yarmush M L; Kohn J

CORPORATE SOURCE: Department of Chemistry, Rutgers-State University of New Jersey, New Brunswick 08903..

CONTRACT NUMBER: GM00550 (NIGMS)

SOURCE: BIOCONJUGATE CHEMISTRY, (1993 Jan-Feb) 4 (1) 54-62. Journal code: A1T. ISSN: 1043-1802.

PUB. COUNTRY: United States

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199305

AB Poly(PEG-Lys), a new, water-soluble poly(ether urethane), derived from L-lysine and poly(ethylene glycol) was investigated as a precursor for the preparation of polymeric drug conjugates. To facilitate a wide variety of coupling chemistries, the pendent carboxyl groups of poly(PEG-Lys) were converted to other reactive functional groups (amino, hydroxyl, active ester, and aldehyde) in high yield. These reactive pendent chains were then used as anchors for the covalent attachment of penicillin V and cephradine, two clinically used antimicrobial agents. Coupling to the carrier was achieved in good yields and the chemical versatility of this system was demonstrated by the preparation of conjugates having antibiotic ligands linked via biostable or biodegradable linkages to the carrier, either directly or via a spacer. Conjugate 4, poly(PEG-Lys-penicillin V ester), was obtained by linking penicillin V to the polymer backbone via hydrolytically labile ester bonds. This conjugate exhibited activity similar to that of the parent drug against three clinically important strains of bacteria. Drug activity coincided with the release of the drug from the carrier. Hydrolytically stable cephradine-containing conjugates were prepared by three different coupling methods but showed no antibiotic activity. <sup>14</sup>C-labeled poly(PEG-Lys) was injected into mice and its biodistribution was monitored for 48 h. The carrier showed no preferential uptake by liver, spleen, or kidney. No signs of acute toxicity were evident in mice or rats when poly(PEG-Lys) was administered iv and ip at doses up to 10 g/kg. These results indicate that poly(PEG-Lys) is a promising precursor for the preparation of soluble drug conjugates.

L11 ANSWER 18 OF 19 MEDLINE

ACCESSION NUMBER: 89252711 MEDLINE

Searcher : Shears 308-4994

09/200791

DOCUMENT NUMBER: 89252711  
TITLE: Transport of nutrients into the renal brush border membrane vesicles as marker in evaluating the role of antipili antibodies in modulation of ascending pyelonephritis in rats.  
AUTHOR: Garg U C; Ganguly N K; Sharma S; Bhatnagar R  
CORPORATE SOURCE: Department of Experimental Medicine, Postgraduate Institute of Medical Education and Research, Chandigarh, India..  
SOURCE: FEMS MICROBIOLOGY LETTERS, (1989 Jan 15) 48 (2) 155-9.  
Journal code: FML. ISSN: 0378-1097.  
PUB. COUNTRY: Netherlands  
Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 198909

AB The uptake of D-glucose, L-aspartate, L-lysine and L-proline was investigated in renal brush border membrane (BBM) vesicles prepared from control, infected or passively-immunized-infected rats. Except L-aspartate, a progressive decrease in the uptake of these nutrients in both infected and immunized-infected groups during the course of infection was observed, but the changes were less apparent in immunized-infected rats than in non-immunized ones. The uptake of L-aspartate was increased in vesicles from early stages of infection but decreased in those from later stages. Also in L-aspartate uptake, the changes were smaller in immunized animals. The uptake of nutrients was detectable earlier than were histopathological alterations of both **kidneys**. The observations demonstrated that **uptake** of D-glucose and amino acids in the kidneys is disturbed prior to appearance of histopathological lesions and thus can be used for early detection of the disease. The data also demonstrate that antipili antibodies afford partial protection against ascending pyelonephritis.

L11 ANSWER 19 OF 19 EMBASE COPYRIGHT 2000 ELSEVIER SCI. B.V.

ACCESSION NUMBER: 74034343 EMBASE  
DOCUMENT NUMBER: 1974034343  
TITLE: L lysine uptake in rat  
kidney cortex slices treated with diazene dicarboxylic acid bis (N,N dimethylamide).  
AUTHOR: Hewitt J.; Leibach F.  
CORPORATE SOURCE: Dept. Cell Molec. Biol., Med. Coll. Georgia, Augusta, Ga. 30902, United States  
SOURCE: Federation Proceedings, (1973) 32/3 (I) (4082).  
CODEN: FEPA7  
DOCUMENT TYPE: Journal  
FILE SEGMENT: 037 Drug Literature Index  
LANGUAGE: English

Searcher : Shears 308-4994

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(FILE 'USPATFULL' ENTERED AT 10:07:58 ON 09 MAY 2000)

L13 37 SEA ABB=ON PLU=ON (L3 OR (L OR D) (W) (LYSINE OR  
LYS)) (L) ((KIDNEY OR RENAL?) (5A) (UPTAK? OR RETENT?))  
L14 28 SEA ABB=ON PLU=ON L13 (L) ADMIN?

L14 ANSWER 1 OF 28 USPATFULL

ACCESSION NUMBER: 2000:15742 USPATFULL  
TITLE: Pretargeting methods and compounds  
INVENTOR(S): Gustavson, Linda M., Seattle, WA, United States  
Theodore, Louis J., Lynnwood, WA, United States  
Su, Fu-Min, Seattle, WA, United States  
Reno, John M., Brier, WA, United States  
PATENT ASSIGNEE(S): NeoRx Corporation, Seattle, WA, United States  
(U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 6022966	20000208
APPLICATION INFO.:	US 1993-156565	19931122 (8)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. WO 1993-US5406, filed on 7 Jun 1993, now patented, Pat. No. WO 5608060 which is a continuation-in-part of Ser. No. US 1992-995381, filed on 23 Dec 1992, now abandoned which is a continuation-in-part of Ser. No. US 1992-895588, filed on 9 Jun 1992, now patented, Pat. No. US 5283342	
DOCUMENT TYPE:	Utility	
PRIMARY EXAMINER:	Cunningham, Thomas M.	
LEGAL REPRESENTATIVE:	Seed and Berry LLP	
NUMBER OF CLAIMS:	14	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	11 Drawing Figure(s); 12 Drawing Page(s)	
LINE COUNT:	4010	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods, compounds, compositions and kits that relate to  
pretargeted delivery of diagnostic and therapeutic agents are  
disclosed. In particular, methods for radiometal labeling of  
biotin, as well as related compounds, are described. Articles of  
manufacture useful in pretargeting methods are also discussed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

INCL INCLM: 540/474.000  
INCLS: 548/304.100; 536/001.110  
NCL NCLM: 540/474.000  
NCLS: 536/001.110; 548/304.100

L14 ANSWER 2 OF 28 USPATFULL

ACCESSION NUMBER: 2000:7398 USPATFULL  
Searcher : Shears 308-4994



09/200791

TITLE: Biotinamido-n-methylglycyl-seryl-o-succinamido-benzyl dota  
INVENTOR(S): Theodore, Louis J., Lynnwood, WA, United States  
Kasina, Sudhakar, Kirkland, WA, United States  
Reno, John M., Brier, WA, United States  
Gustavson, Linda M., Seattle, WA, United States  
PATENT ASSIGNEE(S): NeoRx Corporation, Seattle, WA, United States  
(U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 6015897	20000118
APPLICATION INFO.:	US 1996-645211	19960513 (8)
RELATED APPLN. INFO.:	Division of Ser. No. US 1994-351005, filed on 7 Dec 1994, now abandoned which is a continuation-in-part of Ser. No. US 1993-163188, filed on 7 Dec 1993, now abandoned which is a continuation-in-part of Ser. No. WO 1993-US5406, filed on 7 Jun 1993 which is a continuation-in-part of Ser. No. US 1992-995381, filed on 23 Dec 1992, now abandoned which is a continuation-in-part of Ser. No. US 1992-895588, filed on 9 Jun 1992, now patented, Pat. No. US 5283342	
DOCUMENT TYPE:	Utility	
PRIMARY EXAMINER:	Chan, Christina Y.	
ASSISTANT EXAMINER:	Gambel, Phillip	
LEGAL REPRESENTATIVE:	Seed and Berry LLP	
NUMBER OF CLAIMS:	1	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	12 Drawing Figure(s); 7 Drawing Page(s)	
LINE COUNT:	6303	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods, compounds, compositions and kits that relate to pretargeted delivery of diagnostic and therapeutic agents are disclosed. Biotinamido-N-methylglycyl-seryl-O-succinamido-benzyl DOTA is disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

INCL INCLM: 540/474.000

NCL NCLM: 540/474.000

L14 ANSWER 3 OF 28 USPATFULL

ACCESSION NUMBER: 2000:1524 USPATFULL

TITLE: Biodegradable blood-pool contrast agents

INVENTOR(S): Margerum, Larry, Wayne, PA, United States  
Campion, Brian, Solano Beach, CA, United States  
Fellmann, Jere Douglas, Livermore, CA, United States

Searcher : Shears 308-4994

09/200791

PATENT ASSIGNEE(S):      Garrity, Martha, San Clemente, CA, United States  
                             Varadarajan, John, Sunnyvale, CA, United States  
                             Nycomed Salutar, Inc., Wayne, PA, United States  
                             (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 6010681	20000104
	WO 9528967	19951102
APPLICATION INFO.:	US 1997-722080	19970121 (8)
	WO 1995-GB899	19950420
		19970121 PCT 371 date
		19970121 PCT 102(e) date

	NUMBER	DATE
PRIORITY INFORMATION:	GB 1994-7812	19940420
	GB 1994-20657	19941013
DOCUMENT TYPE:	Utility	
PRIMARY EXAMINER:	Hollinden, Gary E.	
LEGAL REPRESENTATIVE:	Fish & Richardson P.C.	
NUMBER OF CLAIMS:	15	
EXEMPLARY CLAIM:	1	
LINE COUNT:	1469	

AB      The invention provides a blood pool contrast agent having an overall molecular weight of at least 10KD comprising a macrostructure which has bound thereto a plurality of opsonization inhibiting moieties and carries chelated ionic paramagnetic or heavy metal moieties, the chelant groups for said chelated moieties being macrocyclic where said macrostructure is liposomal.

INCL    INCLM: 424/009.350  
         INCLS: 424/009.360; 424/009.364; 424/009.420  
NCL    NCLM: 424/009.350  
         NCLS: 424/009.360; 424/009.364; 424/009.420

L14 ANSWER 4 OF 28    USPATFULL

ACCESSION NUMBER:    1999:136685    USPATFULL  
TITLE:               Pretargeting protocols for the enhanced  
                      localization of cytotoxins to target sites and  
                      cytotoxic combinations useful therefore  
INVENTOR(S):        Fritzberg, Alan R., Edmonds, WA, United States  
                      Abrams, Paul G., Seattle, WA, United States  
                      Reno, John M., Brier, WA, United States  
                      Axworthy, Donald B., Brier, WA, United States  
                      Graves, Scott S., Monroe, WA, United States  
                      Kasina, Sudhakar, Kirkland, WA, United States  
PATENT ASSIGNEE(S):    NeoRx Corporation, Seattle, WA, United States  
                      (U.S. corporation)  
                      Searcher      :      Shears      308-4994

09/200791

	NUMBER	DATE
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PATENT INFORMATION:	US 5976535	19991102
APPLICATION INFO.:	US 1995-468513	19950606 (8)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1993-163188, filed on 7 Dec 1993, now abandoned which is a continuation-in-part of Ser. No. WO 1993-US5406, filed on 7 Jun 1993 which is a continuation-in-part of Ser. No. US 1992-995381, filed on 23 Dec 1992, now abandoned which is a continuation-in-part of Ser. No. US 1992-895588, filed on 9 Jun 1992, now patented, Pat. No. US 5288342	
DOCUMENT TYPE:	Utility	
PRIMARY EXAMINER:	Cunningham, Thomas M.	
LEGAL REPRESENTATIVE:	Seed and Berry LLP	
NUMBER OF CLAIMS:	3	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	13 Drawing Figure(s); 13 Drawing Page(s)	
LINE COUNT:	4278	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		
AB	Methods for targeting cytotoxins to target sites by administration of a combination of conjugates are provided. Novel cytotoxic combinations for use in such methods are also provided.	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

INCL	INCLM: 424/182.100
	INCLS: 424/178.100; 530/387.300; 530/388.800; 530/391.700
NCL	NCLM: 424/182.100
	NCLS: 424/178.100; 530/387.300; 530/388.800; 530/391.700

L14 ANSWER 5 OF 28 USPATFULL

ACCESSION NUMBER:	1999:113890 USPATFULL
TITLE:	Biotinidase resistant biotin-DOTA conjugates
INVENTOR(S):	Axworthy, Donald B., Brier, WA, United States Theodore, Louis J., Lynnwood, WA, United States Gustavson, Linda M., Seattle, WA, United States Reno, John M., Brier, WA, United States
PATENT ASSIGNEE(S):	NeoRx Corporation, Seattle, WA, United States (U.S. corporation)

	NUMBER	DATE
	-----	-----
PATENT INFORMATION:	US 5955605	19990921
APPLICATION INFO.:	US 1996-695940	19960812 (8)
RELATED APPLN. INFO.:	Division of Ser. No. US 1995-351469, filed on 21 Feb 1995, now patented, Pat. No. US 5608060	
DOCUMENT TYPE:	Utility	
	Searcher	: Shears 308-4994

09/200791

PRIMARY EXAMINER: Eisenschenk, Frank C.  
LEGAL REPRESENTATIVE: Seed and Berry LLP  
NUMBER OF CLAIMS: 10  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 22 Drawing Figure(s); 24 Drawing Page(s)  
LINE COUNT: 4727

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Biotinidase-resistant biotin-DOTA conjugates, and methods of use thereof in diagnostic and therapeutic pretargeting methods are provided. These conjugates are useful in diagnosis and treatment of cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

INCL INCLM: 540/474.000  
INCLS: 548/303.700; 548/304.100; 536/001.110; 536/017.400;  
536/053.000; 424/009.363  
NCL NCLM: 540/474.000  
NCLS: 424/009.363; 536/001.110; 536/017.400; 536/053.000;  
548/303.700; 548/304.100

L14 ANSWER 6 OF 28 USPATFULL

ACCESSION NUMBER: 1999:69701 USPATFULL  
TITLE: Pretargeting methods and compounds  
INVENTOR(S): Axworthy, Donald B., Brier, WA, United States  
Fritzberg, Alan R., Edmonds, WA, United States  
Sanderson, James A., Seattle, WA, United States  
PATENT ASSIGNEE(S): NeoRx Corporation, Seattle, WA, United States  
(U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5914312	19990622
APPLICATION INFO.:	US 1994-297429	19940826 (8)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1992-995383, filed on 23 Dec 1992, now abandoned which is a continuation-in-part of Ser. No. US 1992-895588, filed on 9 Jun 1992, now patented, Pat. No. US 5283342	
DOCUMENT TYPE:	Utility	
PRIMARY EXAMINER:	Eisenschenk, Frank C.	
ASSISTANT EXAMINER:	Nolan, Patrick	
LEGAL REPRESENTATIVE:	Seed and Berry LLP	
NUMBER OF CLAIMS:	5	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	22 Drawing Figure(s); 22 Drawing Page(s)	
LINE COUNT:	2191	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods, compounds, compositions and kits that relate to pretargeted delivery of diagnostic and therapeutic agents are  
Searcher : Shears 308-4994

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disclosed. In particular, methods for radiometal labeling of biotin and for improved radiohalogenation of biotin, as well as related compounds, are described. Also, clearing agents, anti-ligand-targeting moiety conjugates, target cell retention enhancing moieties and additional methods are discussed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

INCL INCLM: 514/008.000  
INCLS: 514/387.000; 530/363.000; 530/367.000; 530/350.000;  
530/395.000; 530/394.000; 568/852.000; 536/112.000;  
548/303.700  
NCL NCLM: 514/008.000  
NCLS: 514/387.000; 530/350.000; 530/363.000; 530/367.000;  
530/394.000; 530/395.000; 536/112.000; 548/303.700;  
568/852.000

L14 ANSWER 7 OF 28 USPATFULL

ACCESSION NUMBER: 1999:66990 USPATFULL  
TITLE: Pretargeting protocols for enhanced localization  
of active agents to target sites  
INVENTOR(S): Axworthy, Donald B., Brier, WA, United States  
Mallett, Robert W., Seattle, WA, United States  
Hylarides, Mark D., Mukilteo, WA, United States  
Fritzberg, Alan R., Edmonds, WA, United States  
PATENT ASSIGNEE(S): NeoRx Corporation, Seattle, WA, United States  
(U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5911969	19990615
APPLICATION INFO.:	US 1994-329617	19941026 (8)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1992-995381, filed on 23 Dec 1992, now abandoned which is a continuation-in-part of Ser. No. US 1992-895588, filed on 9 Jun 1992, now patented, Pat. No. US 5283342	
DOCUMENT TYPE:	Utility	
PRIMARY EXAMINER:	Eisenschenk, Frank C.	
ASSISTANT EXAMINER:	Nolan, Patrick J.	
LEGAL REPRESENTATIVE:	Seed and Berry LLP	
NUMBER OF CLAIMS:	9	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	22 Drawing Figure(s); 22 Drawing Page(s)	
LINE COUNT:	2172	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods, compounds, compositions and kits that relate to  
pretargeted delivery of diagnostic and therapeutic agents are  
disclosed. In particular, methods for radiometal labeling of  
biotin and for improved radiohalogenation of biotin, as well as  
Searcher : Shears 308-4994

09/200791

related compounds, are described. Also, clearing agents, anti-ligand-targeting moiety conjugates, target cell retention enhancing moieties and additional methods are discussed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

INCL INCLM: 424/001.110  
INCLS: 424/001.530; 424/001.450; 424/178.100; 424/181.100;  
424/183.100; 424/179.100; 530/367.000; 530/350.000;  
530/825.000; 530/391.900; 530/391.500; 514/387.000;  
548/303.700  
NCL NCLM: 424/001.110  
NCLS: 424/001.450; 424/001.530; 424/178.100; 424/179.100;  
424/181.100; 424/183.100; 514/387.000; 530/350.000;  
530/367.000; 530/391.500; 530/391.900; 530/825.000;  
548/303.700

L14 ANSWER 8 OF 28 USPATFULL

ACCESSION NUMBER: 1998:154419 USPATFULL  
TITLE: Production of nitro-benzyl-dota via direct  
peptide cyclization  
INVENTOR(S): Yau, Eric K., Kirkland, WA, United States  
Theodore, Louis J., Lynnwood, WA, United States  
Gustavson, Linda M., Seattle, WA, United States  
PATENT ASSIGNEE(S): NeoRx Corporation, Seattle, WA, United States  
(U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5847121	19981208
APPLICATION INFO.:	US 1995-571816	19951213 (8)
RELATED APPLN. INFO.:	Division of Ser. No. US 1994-345811, filed on 22 Nov 1994, now patented, Pat. No. US 5541287 which is a continuation-in-part of Ser. No. US 1993-156565, filed on 22 Nov 1993 which is a continuation-in-part of Ser. No. US 1992-995381, filed on 23 Dec 1992, now abandoned which is a continuation-in-part of Ser. No. US 1992-895588, filed on 9 Jun 1992, now patented, Pat. No. US 5283342	
DOCUMENT TYPE:	Utility	
PRIMARY EXAMINER:	Datlow, Philip I.	
LEGAL REPRESENTATIVE:	Seed and Berry LLP	
NUMBER OF CLAIMS:	11	
EXEMPLARY CLAIM:	1,6	
NUMBER OF DRAWINGS:	16 Drawing Figure(s); 16 Drawing Page(s)	
LINE COUNT:	4337	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods, compounds, compositions and kits that relate to  
pretargeted delivery of diagnostic and therapeutic agents are  
Searcher : Shears 308-4994

09/200791

disclosed. In particular, methods for radiometal labeling of biotin, as well as related compounds, are described. Articles of manufacture useful in pretargeting methods are also discussed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

INCL INCLM: 540/474.000

NCL NCLM: 540/474.000

L14 ANSWER 9 OF 28 USPATFULL

ACCESSION NUMBER: 1998:150898 USPATFULL

TITLE: Methods for reduced renal uptake of antibody fragments

INVENTOR(S): Behr, Thomas M., Bloomfield, NJ, United States  
Goldenberg, David M., Mendham, NJ, United States

PATENT ASSIGNEE(S): Center for Molecular Medicine and Immunology,  
Belleville, NJ, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5843894	19981201
APPLICATION INFO.:	US 1995-407899	19950321 (8)
DOCUMENT TYPE:	Utility	
PRIMARY EXAMINER:	Huff, Sheela	
ASSISTANT EXAMINER:	Reeves, Julie E.	
LEGAL REPRESENTATIVE:	Foley & Lardner	
NUMBER OF CLAIMS:	12	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	11 Drawing Figure(s); 7 Drawing Page(s)	
LINE COUNT:	825	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB **Kidney uptake** of antibody fragment conjugates in patients is reduced by **administration** to the patient of one or more compounds selected from the group consisting of **D-lysine, poly-D-lysine, or poly-L-lysine, or pharmaceutically acceptable salts or carboxyl derivatives thereof.**

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

INCL INCLM: 514/012.000

INCLS: 530/300.000; 530/350.000; 530/324.000

NCL NCLM: 514/012.000

NCLS: 530/300.000; 530/324.000; 530/350.000

L14 ANSWER 10 OF 28 USPATFULL

ACCESSION NUMBER: 97:42628 USPATFULL

TITLE: Two-step pretargeting methods using improved biotin-active agent conjugates

INVENTOR(S): Reno, John M., Brier, WA, United States  
Theodore, Louis J., Lynnwood, WA, United States

Searcher : Shears 308-4994

09/200791

PATENT ASSIGNEE(S): Gustavson, Linda M., Seattle, WA, United States  
NeoRx Corporation, Seattle, WA, United States  
(U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5630996	19970520
APPLICATION INFO.:	US 1993-122979	19930916 (8)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1992-995381, filed on 23 Dec 1992, now abandoned And Ser. No. US 1992-995383, filed on 23 Dec 1992, now abandoned , each Ser. No. US - which is a continuation-in-part of Ser. No. US 1992-895588, filed on 9 Jun 1992, now patented, Pat. No. US 5283342	
DOCUMENT TYPE:	Utility	
PRIMARY EXAMINER:	Eisenschenk, Frank C.	
LEGAL REPRESENTATIVE:	Burns, Doane, Swecker & Mathis, L.L.P.	
NUMBER OF CLAIMS:	16	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	22 Drawing Figure(s); 22 Drawing Page(s)	
LINE COUNT:	4768	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods, compounds, compositions and kits that relate to  
pretargeted delivery of diagnostic and therapeutic agents are  
disclosed. In particular, methods for radiometal labeling of  
biotin and for improved radiohalogenation of biotin, as well as  
related compounds, are described. Also, clearing agents,  
anti-ligand-targeting moiety conjugates, target cell retention  
enhancing moieties and additional methods are discussed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

INCL INCLM: 424/001.490  
INCLS: 424/001.530; 424/009.363; 548/303.700; 548/304.100;  
548/520.000; 548/526.000; 514/387.000; 540/474.000;  
530/391.500; 530/391.300; 530/391.100; 546/283.100;  
546/278.700  
NCL NCLM: 424/001.490  
NCLS: 424/001.530; 424/009.363; 514/387.000; 530/391.100;  
530/391.300; 530/391.500; 540/474.000; 546/278.700;  
546/283.100; 548/303.700; 548/304.100; 548/520.000;  
548/526.000

L14 ANSWER 11 OF 28 USPATFULL

ACCESSION NUMBER: 97:36156 USPATFULL  
TITLE: Clearing agents useful in pretargeting methods  
INVENTOR(S): Axworthy, Donald B., Brier, WA, United States  
Reno, John M., Brier, WA, United States  
PATENT ASSIGNEE(S): NeoRx Corporation, Seattle, WA, United States  
Searcher : Shears 308-4994



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(U.S. corporation)

	NUMBER	DATE
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PATENT INFORMATION:	US 5624896	19970429
APPLICATION INFO.:	US 1995-462765	19950605 (8)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1993-163184, filed on 7 Dec 1993, now abandoned which is a continuation-in-part of Ser. No. US 1992-995381, filed on 23 Dec 1992, now abandoned which is a continuation-in-part of Ser. No. US 1992-895588, filed on 9 Jun 1992, now patented, Pat. No. US 5283342	
DOCUMENT TYPE:	Utility	
PRIMARY EXAMINER:	Eisenschenk, Frank C.	
LEGAL REPRESENTATIVE:	Burns, Doane, Swecker & Mathis, L.L.P.	
NUMBER OF CLAIMS:	18	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	12 Drawing Figure(s); 12 Drawing Page(s)	
LINE COUNT:	3943	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		
AB	Novel clearing agents are provided which comprise biotin analog containing clearance-directing moieties. Preferably such clearance-directing moieties endogenously contain or a rederivatized to expose galactose and/or mannose residues.	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

INCL	INCLM: 514/008.000
	INCLS: 530/350.000; 530/386.000; 530/362.000; 530/363.000; 530/402.000; 530/410.000; 548/303.700
NCL	NCLM: 514/008.000
	NCLS: 530/350.000; 530/362.000; 530/363.000; 530/386.000; 530/402.000; 530/410.000; 548/303.700

L14 ANSWER 12 OF 28 USPATFULL

ACCESSION NUMBER:	97:27275 USPATFULL
TITLE:	Hexose derivatized human serum albumin clearing agents
INVENTOR(S):	Axworthy, Donald B., Brier, WA, United States Reno, John M., Brier, WA, United States
PATENT ASSIGNEE(S):	NeoRx Corporation, Seattle, WA, United States (U.S. corporation)

	NUMBER	DATE
	-----	-----
PATENT INFORMATION:	US 5616690	19970401
APPLICATION INFO.:	US 1993-133613	19931008 (8)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1992-995383, filed on 23 Dec 1992, now abandoned which is a Searcher : Shears 308-4994	

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continuation-in-part of Ser. No. US 1992-895588,  
filed on 9 Jun 1992, now patented, Pat. No. US  
5283342

DOCUMENT TYPE: Utility  
PRIMARY EXAMINER: Eisenschenk, Frank C.  
LEGAL REPRESENTATIVE: Burns, Doane, Swecker & Mathis, L.L.P.  
NUMBER OF CLAIMS: 14  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 22 Drawing Figure(s); 22 Drawing Page(s)  
LINE COUNT: 2945

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Novel clearing agents comprising hexose derivatized human serum  
albumin and ligand molecule(s) are provided. These clearing agents  
are useful in pretargeting methods to clear previously  
administered anti-ligand containing conjugates. Preferably, the  
hexose is mannose or galactose and the ligand and anti-ligand are  
respectively biotin and avidin or streptavidin.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

INCL INCLM: 530/363.000  
INCLS: 548/303.700; 530/402.000  
NCL NCLM: 530/363.000  
NCLS: 530/402.000; 548/303.700

L14 ANSWER 13 OF 28 USPATFULL

ACCESSION NUMBER: 97:18284 USPATFULL  
TITLE: Biotinidase-resistant biotin-DOTA conjugates  
INVENTOR(S): Axworthy, Donald B., Brier, WA, United States  
Theodore, Louis J., Lynnwood, WA, United States  
Gustavson, Linda M., Seattle, WA, United States  
Reno, John M., Brier, WA, United States  
PATENT ASSIGNEE(S): NeoRx Corporation, Seattle, WA, United States  
(U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5608060	19970304
	WO 9325240	19931223
APPLICATION INFO.:	US 1995-351469	19950221 (8)
	WO 1993-US5406	19930607
		19950221 PCT 371 date
		19950221 PCT 102(e) date
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1992-995383, filed on 23 Dec 1992, now abandoned And a continuation-in-part of Ser. No. US 1992-995381, filed on 23 Dec 1992, now abandoned , each Ser. No. US - which is a continuation-in-part of Ser. No. US 1992-895588, filed on 9 Jun 1992, now patented, Pat. No. US 5283342, issued on 1 Feb	
	Searcher :	Shears 308-4994

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1994  
DOCUMENT TYPE: Utility  
PRIMARY EXAMINER: Eisenschenk, Frank C.  
LEGAL REPRESENTATIVE: Burns, Doane, Swecker & Mathis, L.L.P.  
NUMBER OF CLAIMS: 9  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 22 Drawing Figure(s); 22 Drawing Page(s)  
LINE COUNT: 4732

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Biotinidase-resistant biotin-DOTA conjugates, and methods of use thereof in diagnostic and therapeutic pretargeting methods are provided. These conjugates are useful in diagnosis and treatment of cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

INCL INCLM: 540/474.000  
INCLS: 548/304.100; 536/001.110; 536/017.400; 536/053.000;  
424/009.363  
NCL NCLM: 540/474.000  
NCLS: 424/009.363; 536/001.110; 536/017.400; 536/053.000;  
548/304.100

L14 ANSWER 14 OF 28 USPATFULL

ACCESSION NUMBER: 96:108662 USPATFULL  
TITLE: Three-step pretargeting methods using improved biotin-active agent  
INVENTOR(S): Theodore, Louis J., Lynnwood, WA, United States  
Reno, John M., Brier, WA, United States  
Gustavson, Linda M., Seattle, WA, United States  
PATENT ASSIGNEE(S): Neorx Corporation, Seattle, WA, United States  
(U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5578287	19961126
APPLICATION INFO.:	US 1993-156614	19931123 (8)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1992-995383, filed on 23 Dec 1992, now abandoned which is a continuation-in-part of Ser. No. US 1992-895588, filed on 9 Jun 1992, now patented, Pat. No. US 5283342	
DOCUMENT TYPE:	Utility	
PRIMARY EXAMINER:	Eisenschenk, Frank C.	
LEGAL REPRESENTATIVE:	Burns, Doane, Swecker & Mathis, L.L.P.	
NUMBER OF CLAIMS:	18	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	2 Drawing Figure(s); 2 Drawing Page(s)	
LINE COUNT:	2318	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Searcher : Shears 308-4994

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AB Methods, compounds, compositions and kits that relate to pretargeted delivery of diagnostic and therapeutic agents are disclosed. In particular, three-step pretargeting methods are described.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

INCL INCLM: 424/001.490  
INCLS: 424/009.363; 424/001.530; 548/303.700; 514/387.000;  
540/474.000; 530/391.500; 530/391.300; 530/391.100  
NCL NCLM: 424/001.490  
NCLS: 424/001.530; 424/009.363; 514/387.000; 530/391.100;  
530/391.300; 530/391.500; 540/474.000; 548/303.700

L14 ANSWER 15 OF 28 USPATFULL

ACCESSION NUMBER: 96:68105 USPATFULL  
TITLE: Pretargeting methods and compounds  
INVENTOR(S): Yau, Eric K., Kirkland, WA, United States  
Theodore, Louis J., Lynnwood, WA, United States  
Gustavson, Linda M., Seattle, WA, United States  
PATENT ASSIGNEE(S): NeoRx Corporation, Seattle, WA, United States  
(U.S. corporation)

	NUMBER	DATE
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PATENT INFORMATION:	US 5541287	19960730
APPLICATION INFO.:	US 1994-345811	19941122 (8)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1993-156565, filed on 22 Nov 1993, now abandoned which is a continuation-in-part of Ser. No. US 1992-995381, filed on 23 Dec 1992, now abandoned which is a continuation-in-part of Ser. No. US 1992-895588, filed on 9 Jun 1992, now patented, Pat. No. US 5283342, issued on 1 Feb 1994	
DOCUMENT TYPE:	Utility	
PRIMARY EXAMINER:	Chan, Christina Y.	
ASSISTANT EXAMINER:	Prickril, Benet	
LEGAL REPRESENTATIVE:	Burns, Doane, Swecker & Mathis, L.L.P.	
NUMBER OF CLAIMS:	10	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	17 Drawing Figure(s); 17 Drawing Page(s)	
LINE COUNT:	4365	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods, compounds, compositions and kits that relate to pretargeted delivery of diagnostic and therapeutic agents are disclosed. In particular, methods for radiometal labeling of biotin, as well as related compounds, are described. Articles of manufacture useful in pretargeting methods are also discussed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Searcher : Shears 308-4994

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INCL INCLM: 530/317.000  
INCLS: 530/330.000; 530/331.000; 530/332.000; 530/323.000;  
530/345.000  
NCL NCLM: 530/317.000  
NCLS: 530/323.000; 530/330.000; 530/331.000; 530/332.000;  
530/345.000

L14 ANSWER 16 OF 28 USPATFULL

ACCESSION NUMBER: 94:53279 USPATFULL

TITLE: Alteration of pharmacokinetics of proteins by  
charge modification

INVENTOR(S): Morgan, Jr., Alton C., Edmonds, WA, United States  
Sivam, Gowsala P., Edmonds, WA, United States  
Abrams, Paul G., Seattle, WA, United States

PATENT ASSIGNEE(S): NeoRx Corporation, Seattle, WA, United States  
(U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5322678	19940621
APPLICATION INFO.:	US 1988-157273	19880217 (7)
DOCUMENT TYPE:	Utility	
PRIMARY EXAMINER:	Lovering, Richard D.	
ASSISTANT EXAMINER:	Covert, John M.	
LEGAL REPRESENTATIVE:	Picard, Roberta A.	
NUMBER OF CLAIMS:	11	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	8 Drawing Figure(s); 5 Drawing Page(s)	
LINE COUNT:	792	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB There is disclosed charge-modified conjugates comprising a  
targeting protein bound to a therapeutic or diagnostic agent.  
Charge-modifying a conjugate to cause an acidic shift in the  
isoelectric point results in prolonged serum half-life upon in  
vivo administration and is useful to accumulate a therapeutic  
agent at the target site. Conversely, charge-modification to cause  
a basic shift in the isoelectric point of the conjugate reduces  
serum half-life upon in vivo use for diagnostic imaging purposes  
and results in higher target-to-background ratios.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

INCL INCLM: 424/001.530  
INCLS: 424/001.490; 424/085.910; 530/391.300; 530/391.500;  
530/391.700; 530/402.000; 530/410.000  
NCL NCLM: 424/001.530  
NCLS: 424/001.490; 424/178.100; 424/182.100; 530/391.300;  
530/391.500; 530/391.700; 530/402.000; 530/410.000

L14 ANSWER 17 OF 28 USPATFULL

Searcher : Shears 308-4994

09/200791

ACCESSION NUMBER: 94:17779 USPATFULL  
TITLE: Nephro protective infusion solutions  
INVENTOR(S): Bertermann, Hagen, Flensburger Strasse 83, D-2300  
Kiel, Germany, Federal Republic of

	NUMBER	DATE
PATENT INFORMATION:	US 5290538	19940301
APPLICATION INFO.:	US 1992-873579	19920421 (7)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1990-566365, filed on 15 Oct 1990, now abandoned	

	NUMBER	DATE
PRIORITY INFORMATION:	DE 1988-3843241	19881222
DOCUMENT TYPE:	Utility	
PRIMARY EXAMINER:	Waddell, Frederick E.	
ASSISTANT EXAMINER:	Hook, Gregory	
LEGAL REPRESENTATIVE:	Larson, Herbert W.	
NUMBER OF CLAIMS:	8	
EXEMPLARY CLAIM:	1	
LINE COUNT:	325	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention herein is a method of protecting against renal damage in a patient receiving carboplatin, cyclosporine A or cisplatin comprising administering to said patient the following mixture of amino acids consisting of glycine, L-alanine, L-serine, L-threonine, L-valine, L-leucine, L-isoleucine and L-proline.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

INCL INCLM: 424/010.000  
INCLS: 514/423.000; 514/561.000; 514/922.000  
NCL NCLM: 514/561.000  
NCLS: 514/423.000; 514/922.000

L14 ANSWER 18 OF 28 USPATFULL

ACCESSION NUMBER: 94:9678 USPATFULL  
TITLE: Biotinylated small molecules  
INVENTOR(S): Gustavson, Linda M., Seattle, WA, United States  
Srinivasan, Ananthachari, St. Charles, MO, United States  
Fritzberg, Alan R., Edmonds, WA, United States  
Reno, John M., Brier, WA, United States  
Axworthy, Donald B., Brier, WA, United States  
PATENT ASSIGNEE(S): NeoRx Corporation, Seattle, WA, United States  
(U.S. corporation)

	NUMBER	DATE
Searcher	:	Shears 308-4994

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PATENT INFORMATION: US 5283342 19940201  
APPLICATION INFO.: US 1992-895588 19920609 (7)  
DOCUMENT TYPE: Utility  
PRIMARY EXAMINER: Higel, Floyd D.  
NUMBER OF CLAIMS: 4  
EXEMPLARY CLAIM: 1,3  
NUMBER OF DRAWINGS: 2 Drawing Figure(s); 2 Drawing Page(s)  
LINE COUNT: 911

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods, compounds, compositions and kits that relate to pretargeted delivery of diagnostic and therapeutic agents are disclosed. In particular, methods for radiometal labeling of biotin and for improved radiohalogenation of biotin, as well as related compounds, are described.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

INCL INCLM: 548/304.100  
INCLS: 435/005.000; 435/006.000; 435/009.000; 436/804.000;  
436/808.000; 436/544.000; 436/545.000; 534/014.000;  
534/015.000  
NCL NCLM: 548/304.100  
NCLS: 435/005.000; 435/006.000; 436/544.000; 436/545.000;  
436/804.000; 436/808.000; 534/014.000; 534/015.000

L14 ANSWER 19 OF 28 USPATFULL

ACCESSION NUMBER: 93:74285 USPATFULL  
TITLE: Renin inhibitors  
INVENTOR(S): Bender, Wolfgang, Wuppertal, Germany, Federal Republic of  
Kinast, Gunther, Wuppertal, Germany, Federal Republic of  
Knorr, Andreas, Erkrath, Germany, Federal Republic of  
Stasch, Johannes-Peter, Wuppertal, Germany, Federal Republic of  
PATENT ASSIGNEE(S): Bayer Aktiengesellschaft, Leverkusen, Germany, Federal Republic of (non-U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5242903	19930907
APPLICATION INFO.:	US 1991-771077	19911002 (7)
RELATED APPLN. INFO.:	Division of Ser. No. US 1990-553493, filed on 13 Jul 1990, now patented, Pat. No. US 5095006	

	NUMBER	DATE
PRIORITY INFORMATION:	DE 1989-3926021	19890805
	DE 1990-4004820	19900216
	Searcher :	Shears 308-4994

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DOCUMENT TYPE: Utility  
PRIMARY EXAMINER: Griffin, Ronald W.  
LEGAL REPRESENTATIVE: Sprung Horn Kramer & Woods  
NUMBER OF CLAIMS: 1  
EXEMPLARY CLAIM: 1  
LINE COUNT: 2680

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Renin-inhibiting peptides of the formula ##STR1## in which X represents a group of the formula ##STR2## represents hydroxyl, alkoxy having up to 8 carbon atoms, benzyloxy or a group of the formula --NR.sup.4 R.sup.5,

A, B, D and E are identical or different and in each case

represent a direct bond,

represent a radical of the formula ##STR3## in which Z denotes oxygen, sulphur or the methylene group

represents a grouping of the formula ##STR4## m represents a number 0, 1 or 2, and L represents a group of the formula --CH.sub.2 --NR2R.sub.3

and physiologically acceptable salts thereof.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

INCL INCLM: 514/018.000  
INCLS: 514/019.000; 530/323.000; 530/330.000; 530/331.000;  
548/314.700; 548/338.100; 548/312.100; 548/315.100;  
548/312.400; 562/445.000  
NCL NCLM: 514/018.000  
NCLS: 514/019.000; 530/323.000; 530/330.000; 530/331.000;  
548/312.100; 548/312.400; 548/314.700; 548/315.100;  
548/338.100; 562/445.000

L14 ANSWER 20 OF 28 USPATFULL

ACCESSION NUMBER: 92:84972 USPATFULL  
TITLE: Polychelating agents for image and spectral enhancement (and spectral shift)  
INVENTOR(S): Ranney, David F., Dallas, TX, United States  
PATENT ASSIGNEE(S): Access Pharmaceuticals Inc., Dallas, TX, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5155215	19921013
APPLICATION INFO.:	US 1990-613465	19901107 (7)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1985-799757, filed on 18 Nov 1985, now abandoned	
	Searcher	: Shears 308-4994



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DOCUMENT TYPE: Utility  
PRIMARY EXAMINER: Maples, John S.  
LEGAL REPRESENTATIVE: Arnold, White & Durkee  
NUMBER OF CLAIMS: 22  
EXEMPLARY CLAIM: 1  
LINE COUNT: 1589

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention includes an image-enhancing agent comprising a biodegradable, water-soluble polymer, synthetic or naturally derived and having repeating hydrophilic monomeric units with amino or hydroxyl groups. This agent also includes chelating agents comprising functional groups bound to an amino or hydroxyl group of the monomeric units. These chelating agents have a formation constant for divalent or trivalent metal cations of at least about  $10^{8.8}$  at physiological temperature and pH. This image-enhancing agent is biodegradable to intermediary metabolites, excretable chelates, oligomers, monomers or combinations thereof of low toxicity.

These image-enhancing agents may further comprise a paramagnetic metal ion for enhancement of the image arising from induced magnetic resonance signals.

Images resulting from scanning of gamma particle emissions may be enhanced when the image-enhancing agent of the present invention comprise radioisotopic metal ions emitting gamma particles.

The physical conversion of these image enhancing agents into microspheres allows further internal directioning of the image-enhancing agents to organs with phagocytic capabilities.

Dextran is a preferred polymer DTPA and gadolinium are respectively preferred chelating agents and paramagnetic metal ions.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

INCL INCLM: 534/016.000  
INCLS: 536/017.100; 536/021.000; 536/051.000; 536/112.000;  
536/113.000; 536/121.000  
NCL NCLM: 534/016.000  
NCLS: 536/017.100; 536/021.000; 536/051.000; 536/112.000;  
536/113.000; 536/121.000

L14 ANSWER 21 OF 28 USPATFULL

ACCESSION NUMBER: 92:61899 USPATFULL  
TITLE: Nutrient composition  
INVENTOR(S): Hara, Takahiro, Machida, Japan  
Furukawa, Tadayasu, Chesterfield, MO, United States

Searcher : Shears 308-4994

09/200791

PATENT ASSIGNEE(S): Kyowa Hakko Kogyo Co., Ltd., Tokyo, Japan  
(non-U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5134125	19920728
	WO 9011024	19901004
APPLICATION INFO.:	US 1990-613687	19901019 (7)
	WO 1990-JP651	19900522
		19901019 PCT 371 date
		19901019 PCT 102(e) date

	NUMBER	DATE
PRIORITY INFORMATION:	JP 1989-75778	19890328
DOCUMENT TYPE:	Utility	
PRIMARY EXAMINER:	Schain, Howard E.	
ASSISTANT EXAMINER:	Koh, Choon P.	
LEGAL REPRESENTATIVE:	Antonelli, Terry, Stout & Kraus	
NUMBER OF CLAIMS:	5	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	1 Drawing Figure(s); 1 Drawing Page(s)	
LINE COUNT:	317	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to nutrient compositions for mammals comprising L-glutamyl-L-glutamine.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

INCL INCLM: 514/019.000

INCLS: 426/656.000

NCL NCLM: 514/019.000

NCLS: 426/656.000

L14 ANSWER 22 OF 28 USPATFULL

ACCESSION NUMBER: 92:27516 USPATFULL

TITLE: Nutrient composition

INVENTOR(S): Furukawa, Tadayasu, Chesterfield, MO, United States

Hara, Takahiro, Machida, Japan

PATENT ASSIGNEE(S): Kyowa Hakko Kogyo Co., Ltd., Tokyo, Japan  
(non-U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5102871	19920407
APPLICATION INFO.:	US 1990-510876	19900418 (7)

NUMBER	DATE
Searcher	Shears 308-4994

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PRIORITY INFORMATION: JP 1989-104261 19890424  
JP 1989-334483 19891222  
DOCUMENT TYPE: Utility  
PRIMARY EXAMINER: Lee, Lester L.  
ASSISTANT EXAMINER: Marshall, S. G.  
LEGAL REPRESENTATIVE: Antonelli, Terry Stout & Kraus  
NUMBER OF CLAIMS: 4  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 4 Drawing Figure(s); 4 Drawing Page(s)  
LINE COUNT: 449

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Nutrient compositions useful as amino acid infusions comprise L-glutamyl-L-cystine and/or L-glutamyl-L-cysteine disulfide. The nutrient compositions can achieve extremely high utilization of cysteine and cystine which could not be hitherto used as nutrient compositions.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

INCL INCLM: 514/011.000  
INCLS: 530/331.000  
NCL NCLM: 514/019.000  
NCLS: 514/018.000; 530/331.000

L14 ANSWER 23 OF 28 USPATFULL

ACCESSION NUMBER: 92:18951 USPATFULL  
TITLE: Renin inhibitors having all retro-inverted peptide bonds  
INVENTOR(S): Bender, Wolfgang, Wuppertal, Germany, Federal Republic of  
Kinast, Gunther, Wuppertal, Germany, Federal Republic of  
Knorr, Andreas, Erkrath, Germany, Federal Republic of  
Stasch, Johannes-Peter, Wuppertal, Germany, Federal Republic of  
PATENT ASSIGNEE(S): Bayer Aktiengesellschaft, Leverkusen, Germany, Federal Republic of (non-U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5095006	19920310
APPLICATION INFO.:	US 1990-553493	19900713 (7)

	NUMBER	DATE
PRIORITY INFORMATION:	DE 1989-3926021	19890508
	DE 1990-4004820	19900216

DOCUMENT TYPE: Utility  
PRIMARY EXAMINER: Wax, Robert A.  
Searcher : Shears 308-4994

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ASSISTANT EXAMINER: Walsh, Stephen  
LEGAL REPRESENTATIVE: Sprung Horn Kramer & Woods  
NUMBER OF CLAIMS: 9  
EXEMPLARY CLAIM: 1  
LINE COUNT: 2702

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Renin-inhibiting peptides of the formula ##STR1## in which X represents a group of the formula ##STR2## represents hydroxyl, alkoxy having up to 8 carbon atoms, benzyloxy or a group of the formula --NR.sup.4 R.sup.5,

A, B, D and E are identical or different and in each case

represent a direct bond,

represent a radical of the formula ##STR3## in which Q1 denotes oxygen, sulphur or the methylene group

represent a grouping of the formula ##STR4## m represents a number 0, 1 or 2, and L represents a group of the formula --CH.sub.2 NR.sup.2 R.sup.3

and physiologically acceptable salts thereof.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

INCL INCLM: 514/019.000  
INCLS: 514/018.000; 530/323.000; 530/331.000; 530/332.000;  
548/344.000; 562/445.000  
NCL NCLM: 514/019.000  
NCLS: 514/018.000; 530/323.000; 530/331.000; 530/332.000;  
548/338.100; 562/445.000

L14 ANSWER 24 OF 28 USPATFULL

ACCESSION NUMBER: 92:7449 USPATFULL  
TITLE: Immunoconjugates and methods for their use in tumor therapy  
INVENTOR(S): Hellstrom, Karl E., Seattle, WA, United States  
Hellestrom, Ingegerd E., Seattle, WA, United States  
Lavie, Efraim, Seattle, WA, United States  
PATENT ASSIGNEE(S): Oncogen, Seattle, WA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5084560	19920128
APPLICATION INFO.:	US 1990-564387	19900807 (7)
RELATED APPLN. INFO.:	Division of Ser. No. US 1987-47161, filed on 12 May 1987, now patented, Pat. No. US 4997913 which	
	Searcher	: Shears 308-4994

09/200791

is a continuation-in-part of Ser. No. US  
1986-880674, filed on 30 Jun 1986, now abandoned

DOCUMENT TYPE: Utility  
PRIMARY EXAMINER: Russel, Jeffrey E.  
ASSISTANT EXAMINER: Kim, Kay  
LEGAL REPRESENTATIVE: Mandel, SaraLynn  
NUMBER OF CLAIMS: 10  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 15 Drawing Figure(s); 15 Drawing Page(s)  
LINE COUNT: 822

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Novel pH-sensitive immunoconjugates which dissociate in low-pH tumor tissue, comprising a chemotherapeutic agent and an antibody reactive with a tumor-associated antigen are described. The chemotherapeutic agent is coupled to the antibody by a link which is unstable in low pH. The link may comprise a spacer consisting of a polyamino acid. Representative antibodies for use in these immunoconjugates include monoclonal antibodies which are not internalized by tumor cells.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

INCL INCLM: 530/390.000  
INCLS: 530/391.000; 424/085.910  
NCL NCLM: 530/391.900  
NCLS: 424/181.100; 530/388.800; 530/388.850

L14 ANSWER 25 OF 28 USPATFULL

ACCESSION NUMBER: 91:19030 USPATFULL  
TITLE: pH-sensitive immunoconjugates and methods for their use in tumor therapy  
INVENTOR(S): Hellstrom, Karl E., Seattle, WA, United States  
Hellstrom, Ingegerd E., Seattle, WA, United States  
Lavie, Efraim, Seattle, WA, United States  
PATENT ASSIGNEE(S): Oncogen, Seattle, WA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 4997913	19910305
APPLICATION INFO.:	US 1987-47161	19870512 (7)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1986-880674, filed on 30 Jun 1986, now abandoned	
DOCUMENT TYPE:	Utility	
PRIMARY EXAMINER:	Draper, Garnette D.	
LEGAL REPRESENTATIVE:	Mandel, SaraLynn	
NUMBER OF CLAIMS:	25	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	15 Drawing Figure(s); 15 Drawing Page(s)	
	Searcher	: Shears 308-4994

09/200791

LINE COUNT: 952

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Novel pH-sensitive immunoconjugates which dissociate in low-pH tumor tissue, comprising a chemotherapeutic agent and an antibody reactive with a tumor-associated antigen are described. The chemotherapeutic agent is coupled to the antibody by a link which is unstable in low pH. The link may comprise a spacer consisting of a polyamino acid. Representative antibodies for use in these immunoconjugates include monoclonal antibodies which are not internalized by tumor cells.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

INCL INCLM: 530/389.000

INCLS: 530/390.000; 530/391.000; 530/810.000; 530/812.000;  
424/085.910; 424/009.000; 514/002.000; 514/008.000;  
514/021.000; 514/885.000

NCL NCLM: 424/181.100

NCLS: 514/002.000; 514/008.000; 514/021.000; 514/885.000;  
530/388.850; 530/391.900; 530/810.000; 530/812.000

L14 ANSWER 26 OF 28 USPATFULL

ACCESSION NUMBER: 89:25837 USPATFULL

TITLE: Renin inhibitors and aminoacid and aminoaldehyde derivatives

INVENTOR(S): Bender, Wolfgang, Wuppertal, Germany, Federal Republic of  
Henning, Rolf, Wuppertal, Germany, Federal Republic of  
Knorr, Andreas, Erkrath, Germany, Federal Republic of  
Stasch, Johannes-Peter, Wuppertal, Germany, Federal Republic of

PATENT ASSIGNEE(S): Bayer Aktiengesellschaft, Leverkusen, Germany, Federal Republic of (non-U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 4818748	19890404
APPLICATION INFO.:	US 1987-22710	19870306 (7)

	NUMBER	DATE
PRIORITY INFORMATION:	DE 1986-3608209	19860312
	DE 1986-3628650	19860823
DOCUMENT TYPE:	Utility	
PRIMARY EXAMINER:	Phillips, Delbert R.	
LEGAL REPRESENTATIVE:	Sprung Horn Kramer & Woods	
NUMBER OF CLAIMS:	14	
EXEMPLARY CLAIM:	1	

Searcher : Shears 308-4994

09/200791

LINE COUNT: 2811

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Anti-hypertensive compounds of the formula ##STR1## in which A represents hydrogen, C.sub.1 -C.sub.8 -alkyl, C.sub.7 -C.sub.14 -aralkyl, phenylsulphonyl, tolylsulphonyl or C.sub.1 -C.sub.8 -alkylsulphonyl, or represents an aminoprotective group,

B represents a direct bond, or represents sarcosyl, or represents a group of the formula ##STR2## D represents a direct bond, or represents a group of the formula ##STR3## wherein X represents methylene, ethylene or sulphur,

E, G, J, K, L and M independently have the same meanings as B,

R.sup.1 is an optionally substituted phenyl radical, and

Q is a hydroxy, alkoxy or amino group, or a physiologically acceptable salt thereof.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

INCL INCLM: 514/016.000

INCLS: 514/017.000; 514/018.000; 514/019.000; 530/328.000;  
530/329.000; 530/330.000; 530/331.000

NCL NCLM: 514/016.000

NCLS: 514/017.000; 514/018.000; 514/019.000; 530/328.000;  
530/329.000; 530/330.000; 530/331.000; 530/860.000;  
930/020.000; 930/021.000; 930/030.000; 930/250.000

L14 ANSWER 27 OF 28 USPATFULL

ACCESSION NUMBER: 81:2484 USPATFULL

TITLE: Human serum plasminogen activator

INVENTOR(S): Reich, Edward, New York, NY, United States  
Guha, Arabinda, Pelham Manor, NY, United States  
Schleuning, Wolf-Dieter, New York, NY, United States

PATENT ASSIGNEE(S): Rockefeller University, New York, NY, United States (U.S. corporation)

NUMBER DATE

PATENT INFORMATION: US 4245051 19810113  
APPLICATION INFO.: US 1978-891808 19780330 (5)  
DOCUMENT TYPE: Utility  
PRIMARY EXAMINER: Shapiro, Lionel M.  
LEGAL REPRESENTATIVE: Haight, Rosfeld, Noble & Santa Maria  
NUMBER OF CLAIMS: 4  
EXEMPLARY CLAIM: 1  
LINE COUNT: 804

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Searcher : Shears 308-4994

09/200791

AB A plasminogen proactivator and a corresponding activator has been isolated from mammalian and avian, especially human, plasma which is characterized within a given species as a single, electrophoretically and immunologically homogeneous protein. The activator acts as a catalyst to initiate fibrinolytic activity in plasma and is therefore useful in controlling clotting which occurs, e.g. in venous thrombosis or arterial occlusion, and in diagnosing conditions which predispose to thromboembolic phenomena. The proactivator has a long useful in vivo half life and can be used to provide a reservoir for maintaining the fibrolytic potential of blood.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

INCL INCLM: 435/212.000

INCLS: 260/112.000B; 424/101.000

NCL NCLM: 435/212.000

NCLS: 424/531.000; 530/395.000; 530/830.000; 530/831.000

L14 ANSWER 28 OF 28 USPATFULL

ACCESSION NUMBER: 78:36356 USPATFULL

TITLE: Therapeutic compositions comprising alpha-hydroxy analogs of essential amino acids and their administration to humans for promotion of protein synthesis and suppression of urea formation

INVENTOR(S): Walser, Mackenzie, Ruxton, MD, United States

PATENT ASSIGNEE(S): The Johns Hopkins University, Baltimore, MD, United States (U.S. corporation)

NUMBER DATE

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PATENT INFORMATION: US 4100160 19780711

APPLICATION INFO.: US 1976-669588 19760323 (5)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1974-461259, filed on 15 Apr 1974, now abandoned And Ser. No. US 1974-461260, filed on 15 Apr 1974, now abandoned, each which is a continuation-in-part of Ser. No. US 1973-355326, filed on 30 Apr 1973, now abandoned And Ser. No. US 1973-355327, filed on 30 Apr 1973, now abandoned, said Ser. No. 355327 which is a continuation-in-part of Ser. No. US 1972-270986, filed on 12 Jul 1972, now abandoned

DOCUMENT TYPE: Utility

PRIMARY EXAMINER: Schenkman, Leonard

LEGAL REPRESENTATIVE: Seidel, Gonda & Goldhammer

NUMBER OF CLAIMS: 30

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 1 Drawing Figure(s); 1 Drawing Page(s)

LINE COUNT: 1284

Searcher : Shears 308-4994



09/200791

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions containing the hydroxy analogs of certain essential amino acids are formulated for therapeutic use, particularly in the treatment of renal disorders, hepatic failure and conditions of protein wasting in human subjects. In preferred embodiments, keto analogs of certain essential amino acids are used in combination with hydroxy analogs of other essential amino acids.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

INCL INCLM: 424/274.000  
INCLS: 424/317.000; 424/319.000  
NCL NCLM: 514/400.000  
NCLS: 514/419.000; 514/557.000; 514/561.000; 514/564.000;  
514/565.000; 514/570.000; 514/893.000

FILE 'REGISTRY' ENTERED AT 10:17:59 ON 09 MAY 2000

E ONCONASE/CN 5  
L15 1 SEA ABB=ON PLU=ON ONCONASE/CN  
E RIBONUCLEASE/CN 5  
E RIBONUCLEASE/CN  
L16 215 SEA ABB=ON PLU=ON RIBONUCLEASE ?/CN  
L17 216 SEA ABB=ON PLU=ON L15 OR L16

FILE 'CAPLUS' ENTERED AT 10:18:53 ON 09 MAY 2000

L18 31825 SEA ABB=ON PLU=ON L17 OR RIBONUCLEASE OR ONCONASE OR  
(RIBONUCLEIC OR RIBO NUCLEIC) (1W) BIND? (W) PROTEIN  
L19 242 SEA ABB=ON PLU=ON L18 AND (L3 OR (D OR L) (W) (LYSINE OR  
LYS))  
L20 8 SEA ABB=ON PLU=ON L19 AND (KIDNEY OR RENAL?)  
L21 8 SEA ABB=ON PLU=ON L20 NOT L9

L21 ANSWER 1 OF 8 CAPLUS COPYRIGHT 2000 ACS

ACCESSION NUMBER: 2000:260484 CAPLUS  
TITLE: Methods for identifying inhibitors of  
post-Amadori advanced glycation endproduct (AGE)  
formation, inhibiting oxidative modification of  
proteins, and treating lipid peroxidation and  
atherosclerosis  
INVENTOR(S): Baynes, John; Onorato, Joelle; Thorpe, Suzanne;  
Khalifah, Raja; Hudson, Billy  
PATENT ASSIGNEE(S): Kansas University Medical Center, USA;  
University of South Carolina  
SOURCE: PCT Int. Appl., 156 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

Searcher : Shears 308-4994

09/200791

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000022094	A2	20000420	WO 1999-US23702	19991008

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1998-PV103795 19981009

AB Compns. and methods are provided for modeling post-Amadori AGE formation and the identification and characterization of effective inhibitors of post-Amadori AGE formation, and such identified inhibitor compns. Also provided are methods to treat or prevent oxidative modification of proteins, including LDL, to treat or prevent lipid peroxidn., and to treat or prevent atherosclerosis, comprising administering an amt. effective of one of the compds. of the invention to treat or prevent the disorder. Inhibitors of the invention include benzene and pyridine derivs, e.g. pyridoxamine.

IT INDEXING IN PROGRESS

IT 9001-99-4

RL: BPR (Biological process); BIOL (Biological study); PROC (Process)

(A; methods for identifying inhibitors of post-Amadori AGE formation, inhibiting oxidative modification of proteins, and treating lipid peroxidn. and atherosclerosis)

L21 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2000 ACS

ACCESSION NUMBER: 1997:555607 CAPLUS

DOCUMENT NUMBER: 127:245075

TITLE: Standardizing the immunological measurement of advanced glycation end products using normal human serum

AUTHOR(S): Mitsuhashi, Tomoko; Vlassara, Helen; Founds, H. W.; Li, Yong Ming

CORPORATE SOURCE: The Picower Institute for Medical Research, 350 Community Drive, Manhasset, NY, 11030, USA

SOURCE: J. Immunol. Methods (1997), 207(1), 79-88  
CODEN: JIMMBG; ISSN: 0022-1759

PUBLISHER: Elsevier

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Advanced glycation end products (AGEs) have been linked to many sequelae of diabetes, renal disease, and aging. To detect AGE levels in human tissues and blood samples, a competitive ELISA has been widely used. As no consensus or std. research method for  
Searcher : Shears 308-4994

09/200791

the quantitation of AGEs currently exists, nor is a universally defined AGE unit available, the comparative quantitation of AGEs between research labs. is problematic and restricts the usefulness of interlab. clin. data. By comparing the cross-reactivities of 5 different anti-AGE antisera with 5 different in vitro AGE-modified proteins, we found that the immunol. recognition of AGEs by competitive ELISA is both AGE-carrier protein- and anti-AGE antibody-dependent. This suggests that in vitro AGE-modified proteins might not be appropriate stds. for AGEs that occur naturally in vivo. Based on our observation that serum AGE levels in the normal human population are consistently within a narrow range and several-fold lower than in diabetics, we propose a method to standardize AGE units against normal human serum (NHS). In this new method, one AGE unit is defined as the inhibition that results from 1:5 dild. NHS in the competitive AGE-ELISA; thus the AGE value in NHS is 5 units/mL. This NHS method requires a competitive AGE-ELISA with reasonable sensitivity such that 1:5 NHS produces a 25-40% inhibition of anti-AGE antibody binding to immobilized AGE-proteins. By using this standardized method we found that the AGE levels in normal human serum (5.0  $\pm$  2.2 units/mL) fit a normal distribution (.chi.2-test), and the serum AGE levels in diabetic patients (20.3  $\pm$  3.8 units/mL) are significantly higher than that of the normal population. Since AGE units can now be defined against a universally available std., NHS, the results of quant. AGE measurements using this method should be comparable between assays and between different labs. Taken together, standardizing the AGE-ELISA protocol as described here provides a simple and quant. method that should facilitate the expanded application of clin. AGE data.

IT 9001-99-4D, RNase, AGE-modified  
25104-18-1D, Poly-L-lysine, AGE-modified  
38000-06-5D, Poly-L-lysine, AGE-modified  
RL: BPR (Biological process); BIOL (Biological study); PROC  
(Process)  
(ELISA stds. for advanced glycation end products using normal human serum)

L21 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2000 ACS  
ACCESSION NUMBER: 1997:335556 CAPLUS  
DOCUMENT NUMBER: 126:327767  
TITLE: Immunochemical detection of in vivo advanced glycosylation end products [AGE]  
INVENTOR(S): Bucala, Richard J.  
PATENT ASSIGNEE(S): Rockefeller University, USA  
SOURCE: U.S., 29 pp. Cont.-in-part of U.S. Ser. No. 811,579, abandoned.  
CODEN: USXXAM  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
Searcher : Shears 308-4994

09/200791

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5624804	A	19970429	US 1992-956849	19921001
CN 1079825	A	19931222	CN 1992-115235	19921219
WO 9313421	A1	19930708	WO 1992-US11158	19921221
W: AT, AU, BB, BG, BR, CA, CH, CS, DE, DK, ES, FI, GB, HU, JP, KP, KR, LK, LU, MG, MN, MW, NL, NO, PL, RO, RU, SD, SE				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, SN, TD, TG				
AU 9334187	A1	19930728	AU 1993-34187	19921221
AU 681340	B2	19970828		
EP 623216	A1	19941109	EP 1993-902713	19921221
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
JP 07502534	T2	19950316	JP 1992-511864	19921221
US 5629408	A	19970513	US 1995-476381	19950607
US 5683887	A	19971104	US 1995-487055	19950607
US 5702704	A	19971230	US 1995-486513	19950607
US 5712101	A	19980127	US 1995-472398	19950607
US 5733546	A	19980331	US 1995-484869	19950607

PRIORITY APPLN. INFO.:

US 1991-811579 19911220  
US 1992-956849 19921001  
WO 1992-US11158 19921221

AB The circulating advanced glycosylation end products Hb-AGE, serum AGE-peptides, and urinary AGE-peptides are disclosed as long-term markers of diseases and dysfunctions having as a characteristic the presence of a measurable difference in AGE concn. Diagnostic and therapeutic protocols taking advantage of the characteristics of these AGEs are disclosed. Antibodies which recognize and bind to in vivo-derived AGEs are also disclosed. Methods of using these antibodies as well as pharmaceutical compns. are also disclosed, along with numerous diagnostic applications, including methods for the measurement of the presence and amt. of AGEs in both plants and animals, including humans, as well as in cultivated and synthesized protein material for therapeutic use.

IT 9001-99-4D, RNase, AGE-contg.

RL: ARU (Analytical role, unclassified); ANST (Analytical study)  
(advanced glycosylation end products immunoassay in vivo in disease diagnosis)

L21 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2000 ACS

ACCESSION NUMBER: 1993:535029 CAPLUS

DOCUMENT NUMBER: 119:135029

TITLE: Immunochemical detection of in vivo advanced glycosylation endproducts (AGEs)

INVENTOR(S): Bucala, Richard J.

Searcher : Shears 308-4994

09/200791

PATENT ASSIGNEE(S): Rockefeller University, USA  
SOURCE: PCT Int. Appl., 83 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 4  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9313421	A1	19930708	WO 1992-US11158	19921221
W: AT, AU, BB, BG, BR, CA, CH, CS, DE, DK, ES, FI, GB, HU, JP, KP, KR, LK, LU, MG, MN, MW, NL, NO, PL, RO, RU, SD, SE				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, SN, TD, TG				
US 5624804	A	19970429	US 1992-956849	19921001
AU 9334187	A1	19930728	AU 1993-34187	19921221
AU 681340	B2	19970828		
EP 623216	A1	19941109	EP 1993-902713	19921221
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
JP 07502534	T2	19950316	JP 1992-511864	19921221
PRIORITY APPLN. INFO.:				
			US 1991-811579	19911220
			US 1992-956849	19921001
			WO 1992-US11158	19921221
AB	Circulating Hb-AGE, serum AGE-peptides, and urinary AGE-peptides are disclosed as long-term markers of diseases and dysfunctions having as a characteristic the presence of a measurable difference in AGE concn. Diagnostic and therapeutic protocols taking advantage of the characteristics of these AGEs are disclosed. Antibodies which recognize and bind to in vivo-derived AGEs are also disclosed, as are methods using the antibodies, pharmaceutical compns., diagnostic applications, etc. Prepn. of polyclonal anti-AGE antibodies, AGE formation kinetics, diabetes evaluation, etc. are described.			
IT	25104-18-1, Poly-L-lysine 38000-06-5, Poly-L-lysine, SRU RL: ANST (Analytical study) (advanced glycosylation endproducts immunochem. detection in analyte sample of)			
IT	9001-99-4D, advanced glycosylation endproducts RL: ANST (Analytical study) (antiserum to)			

L21 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2000 ACS  
ACCESSION NUMBER: 1991:3990 CAPLUS  
DOCUMENT NUMBER: 114:3990  
TITLE: Membrane destruction by polyamines  
AUTHOR(S): Fukushima, Yoshihiro  
CORPORATE SOURCE: Natl. Child. Med. Res. Cent., Tokyo, 154, Japan  
Searcher : Shears 308-4994

09/200791

SOURCE: Biomed. Res. (1990), 11(5), 345-52  
CODEN: BRES5; ISSN: 0388-6107

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Treatment of membranes from the sheep kidney or rat brain with polyamines (spermidine, histone, or polylysine) at 0.degree. disrupted the membrane structure. The recovery of membrane proteins and phospholipids was decreased in the ppt. and increased in the supernatant of the treated membranes after centrifugation. The polyamines converted the membranes to buoyant particles. As various naturally occurring low-mol.-wt. polyamines and synthetic or natural polypeptides generally destabilized the membrane, it appeared that no specific polyamine conformation was required; the pos. charged amino groups alone seemed to be sufficient. High concns. of monovalent salts such as ammonium sulfate or lithium chloride stabilized the membranes against the polyamines. In the presence of a low concn. of SDS (at which SDS itself had no effect on membrane stability), even monoamines such as arginine disrupted the membrane at high concns.

IT 9001-99-4, Ribonuclease 25104-18-1,  
Poly-L-lysine 38000-06-5, Poly-L-lysine

RL: BIOL (Biological study)  
(cell membrane degrdn. by, salts interaction with)

L21 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2000 ACS

ACCESSION NUMBER: 1982:67142 CAPLUS

DOCUMENT NUMBER: 96:67142

TITLE: Role of leukocyte factors and cationic polyelectrolytes in phagocytosis of group A streptococci and Candida albicans by neutrophils, macrophages, fibroblasts and epithelial cells: modulation by anionic polyelectrolytes in relation to pathogenesis of chronic inflammation

AUTHOR(S): Ginsburg, Isaac; Sela, Michael N.; Morag, Abraham; Ravid, Zohar; Duchan, Zvia; Ferne, Mina; Rabinowitz-Bergner, Sonia; Thomas, Peter Page; Davies, Philip; et al.

CORPORATE SOURCE: Hadassah Sch. Dent. Med., Hebrew Univ., Jerusalem, Israel

SOURCE: Inflammation (N. Y.) (1981), 5(4), 289-312  
CODEN: INFLD4; ISSN: 0360-3997

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A variety of cationic polyelectrolytes opsonized group A streptococci and C. albicans to phagocytosis by human polymorphonuclear leukocytes and by mouse peritoneal macrophages. The most potent opsonins for streptococci were specific antibodies

Searcher : Shears 308-4994

supplemented with complement, nuclear histone, polylysine, polyarginine, RNase, leukocyte lysates, leukocyte cationic protein and, to a lesser extent, lysozyme and myeloperoxidase. Histone, RNase, leukocyte exts., and platelet exts. also functioned as opsonins for phagocytosis of streptococci in the peritoneal cavity, where phagocytic indexes, higher than those obtained for the in vitro phagocytosis, were obtained. Fresh serum, polylysine, polyarginine, and nuclear histone acted as good opsonins for Candida, but none of the other factors tested were active. In order for the cationic proteins and leukocyte exts. to function as opsonins, they must be present on the particle surface. These agents were poor opsonins when applied on the macrophages. Nuclear histone, polylysine, polyarginine, and fresh human serum also functioned as good opsonins for the uptake of Candida by mouse fibroblasts. On the other hand, none of the other substances which opsonized streptococci were effective with Candida. The phagocytic capabilities of fibroblast polykaryons were much higher than those of ordinary spindle-shaped mouse fibroblasts. Histone also functioned as a good opsonic agent for the uptake of Candida by human fibroblasts, HeLa cells, epithelial cells, monkey kidney cells, and rat heart cells. On the other hand, neither leukocyte exts. nor RNase LCP or MPO functioned as opsonins for these mammalian cells. Candida, Taken up by fibroblasts, were present within tight phagosomes, but no fusion of lysosomes with the phagosome occurred. A small proportion of the internalized yeast cells underwent partial plasmolysis, but little damage to the rigid cell walls was obsd. within 24-48 h of internalization. Phagocytosis of streptococci and Candida by macrophages and the uptake of Candida by fibroblasts were both strongly inhibited by liquoid (polyanethole sulfonic acid sodium salt). This anionic polyelectrolyte also markedly inhibited the release of N-acetylglucosaminidase from macrophages without affecting cell viability. Hyaluronic acid, DNA, and dextran sulfate markedly inhibited the uptake of histone-coated particles by macrophages. On the other hand, hyaluronic acid and DNA enhanced the uptake of Candida by fibroblasts. The effect of these anionic polyelectrolytes on phagocytosis of serum-opsonized particles by macrophages was not consistent. While in some expts. it blocked phagocytosis, in others it either had no effect or even enhanced the uptake of the particles. Phagocytosis of microorganisms by nonprofessional phagocytes like fibroblasts and the paucity in these cells of hydrolases capable of breaking down microbial cell wall components may contribute to the persistence of nonbiodegradable components of bacteria in tissues and to the perpetuation of chronic inflammatory sequellae. Cationic polyelectrolytes may also prove important as helper opsonins and as agents capable of enhancing the penetration into cells of both viable and nonviable particles, genetic material, and drugs.

IT 9001-99-4 25104-18-1 38000-06-5

Searcher : Shears 308-4994

09/200791

RL: BIOL (Biological study)  
(as opsonins, in phagocytosis of Streptococcus and Candida,  
inflammation in relation to)

L21 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2000 ACS

ACCESSION NUMBER: 1981:474555 CAPLUS

DOCUMENT NUMBER: 95:74555

TITLE: Inhibition of renal accumulation of  
lysozyme (basic low molecular weight protein) by  
basic proteins and other basic substances

AUTHOR(S): Cojocel, C.; Franzen-Sieveking, M.; Beckmann,  
G.; Baumann, K.

CORPORATE SOURCE: Physiol. Inst., Univ. Hamburg, Hamburg,  
D-2000/13, Fed. Rep. Ger.

SOURCE: Pfluegers Arch. (1981), 390(3), 211-15  
CODEN: PFLABK; ISSN: 0031-6768

DOCUMENT TYPE: Journal

LANGUAGE: English

AB When rats were given egg white lysozyme [9001-63-2] (7 nmol, i.v.),  
31.7% of the injected dose was accumulated in the kidneys.  
Basic substances, such as cytochrome c [9007-43-6], RNase  
[9001-99-4], spermine tetrahydrochloride [306-67-2],  
L-arginine [74-79-3], and L-lysine [56-87-1],  
inhibited lysozyme accumulation, whereas the neutral myoglobin had  
no effect. Proximal tubular lysozyme reabsorption was inhibited by  
cytochrome c in a dose-dependent fashion.

IT 9001-99-4

RL: PRP (Properties)  
(lysozyme accumulation by kidney inhibition by)

L21 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2000 ACS

ACCESSION NUMBER: 1973:451652 CAPLUS

DOCUMENT NUMBER: 79:51652

TITLE: Poly(riboinosinic acid) more important than  
poly(ribocytidylic acid) in the interferon  
induction process by poly(riboinosinic  
acid).poly(ribocytidylic acid)

AUTHOR(S): De Clercq, Erik; Stewart, William E., II; De  
Somer, Pierre

CORPORATE SOURCE: Rega Inst. Med. Res., Univ. Leuven, Louvain,  
Belg.

SOURCE: Virology (1973), 54(1), 278-82  
CODEN: VIRLAX

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A significantly greater interferon prodn. has been obtained in  
primary rabbit kidney cell cultures exposed to poly(rI)  
followed by poly(rC) than in cell cultures exposed to poly(rC)  
followed by poly(rI). The interferon response in cell cultures

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exposed to poly(rI) followed by poly(rC) was markedly more resistant to poly-L-lysine and pancreatic RNase treatment than was the interferon response in cell cultures exposed to poly(rC) followed by poly(rI). Poly-L-lysine treatment removed a substantially greater proportion of cell-assocd. radioactivity from cells exposed to [3H]poly(rC) followed by poly(rI) than from cells exposed to poly(rI) followed by [3H]-poly(rC). These findings suggest that the poly(rI).poly(rC) complex is more tightly and efficiently bound to the cell (surface) when the homopolymers are added in the order poly(rI), poly(rC) than when they are added in the order poly(rC), poly(rI) and that it is more effectively attached to the cell receptor site by its poly(rI) strand rather than by its poly(rC) strand.

(FILE 'CAPLUS' ENTERED AT 10:18:53 ON 09 MAY 2000)

L22 31825 SEA ABB=ON PLU=ON L17 OR RIBONUCLEASE OR ONCONASE OR  
(RIBONUCLEIC OR RIBO NUCLEIC) (1W) BIND? (W) PROTEIN OR  
RNASE  
L23 242 SEA ABB=ON PLU=ON L22 AND (L3 OR (D OR L) (W) (LYSINE OR  
LYS))  
L24 8 SEA ABB=ON PLU=ON L23 AND (KIDNEY OR RENAL?)  
L25 0 SEA ABB=ON PLU=ON L24 NOT (L9 OR L20)

(FILE 'MEDLINE, BIOSIS, EMBASE, LIFESCI, WPIDS, CONFSCI, SCISEARCH,  
JICST-EPLUS' ENTERED AT 10:23:18 ON 09 MAY 2000)

L26 7 S L24  
L27 7 S L26 NOT L10  
L28 4 DUP REM L27 (3 DUPLICATES REMOVED)

L28 ANSWER 1 OF 4 EMBASE COPYRIGHT 2000 ELSEVIER SCI. B.V.

ACCESSION NUMBER: 82086433 EMBASE

DOCUMENT NUMBER: 1982086433

TITLE: Role of leukocyte factors and cationic  
polyelectrolytes in phagocytosis of group A  
streptococci and Candida albicans by neutrophils,  
macrophages, fibroblasts and epithelial cells:  
Modulation by anionic polyelectrolytes in relation to  
pathogenesis of chronic inflammation.

AUTHOR: Ginsburg I.; Sela M.N.; Morag A.; et al.

CORPORATE SOURCE: Dept. Oral Biol., Hebrew Univ. Hadassah Sch. Dent.  
Med., Jerusalem, Israel

SOURCE: Inflammation, (1981) 5/4 (289-312).

CODEN: INFLD4

COUNTRY: United States

DOCUMENT TYPE: Journal

FILE SEGMENT: 037 Drug Literature Index  
026 Immunology, Serology and Transplantation  
004 Microbiology  
013 Dermatology and Venereology  
Searcher : Shears 308-4994

LANGUAGE: English

AB A variety of cationic polyelectrolytes opsonized group A streptococci and *Candida albicans* to phagocytosis by human polymorphonuclear leukocytes and by mouse peritoneal macrophages. The most potent opsonins for streptococci were specific antibodies supplemented with complement, nuclear histone, polylysine, polyarginine, **ribonuclease**, leukocyte lysates, leukocyte cationic protein and, to a lesser extent, lysozyme and myeloperoxidase. Histone, **RNase**, leukocyte extracts, and platelet extracts also functioned as opsonins for phagocytosis of streptococci in the peritoneal cavity, where phagocytic indices, higher than those obtained for the in vitro phagocytosis, were obtained. Fresh serum, polylysine, polyarginine, and nuclear histone acted as good opsonins for *Candida*, but none of the other factors tested were active. In order for the cationic proteins and leukocyte extracts to function as opsonins, they must be present on the particle surface. These agents were poor opsonins when applied on the macrophages. Nuclear histone, polylysine, polyarginine, and fresh human serum also functioned as good opsonins for the uptake of *Candida* by mouse fibroblasts. On the other hand, none of the other substances which opsonized streptococci were effective with *Candida*. The phagocytic capabilities of fibroblast polykaryons were much higher than those of ordinary spindle-shaped mouse fibroblasts. Histone also functioned as good opsonic agent for the uptake of *Candida* by human fibroblasts, HeLa cells, epithelial cells, monkey **kidney** cells, and rat heart cells. On the other hand, neither leukocyte extracts nor **ribonuclease** LCP or MPO functioned as opsonins for these mammalian cells. *Candida*, taken up by fibroblasts, were present within tight phagosomes, but no fusion of lysosomes with the phagosome occurred. A small proportion of the internalized yeast cells underwent partial plasmolysis, but little damage to the rigid cell walls was observed within 24-48 h of internalization. Phagocytosis of streptococci and *Candida* by macrophages and the uptake of *Candida* by fibroblasts were both strongly inhibited by liquid (polyanethole sulfonic acid sodium salt). This anionic polyelectrolyte also markedly inhibited the release of N-acetylglucosaminidase from macrophages without affecting cell viability (LDH release). Hyaluronic acid, DNA, and dextran sulfate markedly inhibited the uptake of histone-coated particles by macrophages. On the other hand, hyaluronic acid and DNA enhanced the uptake of *Candida* by fibroblasts. The effect of these anionic polyelectrolytes on phagocytosis of serum-opsonized particles by macrophages was not consistent. While in some experiments it blocked phagocytosis, in others it either had no effect or even enhanced the uptake of the particles. Phagocytosis of microorganisms by 'nonprofessional' phagocytes like fibroblasts and the paucity in these cells of hydrolases capable of breaking down microbial cell wall components may contribute to the persistence of nonbiodegradable components of bacteria in tissues and to the

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perpetuation of chronic inflammatory sequellae. Cationic polyelectrolytes may also prove important as 'helper' opsonins and as agents capable of enhancing the penetration into cells of both viable and nonviable particles, genetic material, and drugs.

L28 ANSWER 2 OF 4 MEDLINE DUPLICATE 1  
ACCESSION NUMBER: 81246726 MEDLINE  
DOCUMENT NUMBER: 81246726  
TITLE: Inhibition of **renal** accumulation of  
lysozyme (basic low molecular weight protein) by  
basic proteins and other basic substances.  
AUTHOR: Cojocel C; Franzen-Sievecking M; Beckmann G; Baumann K  
SOURCE: PFLUGERS ARCHIV. EUROPEAN JOURNAL OF PHYSIOLOGY,  
(1981 Jun) 390 (3) 211-5.  
Journal code: OZX. ISSN: 0031-6768.  
PUB. COUNTRY: GERMANY, WEST: Germany, Federal Republic of  
Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 198111

AB Together the two rat **kidneys** accumulated a total of 31.7  
+/- 1.6% of the intravenously injected amount of 7 nmoles  
egg-white-lysozyme (measured as iodine 125 lysozyme) within 10 min.  
The low molecular weight protein lysozyme and other basic substances  
were injected simultaneously in order to evaluate whether these  
basic substances can inhibit the **renal** lysozyme  
accumulation. The inhibitory effect of various basic compounds was  
dose-dependent with a maximal reduction of lysozyme accumulation to  
11.7 +/- 0.08%. The basic substances could be divided into three  
groups depending upon the micromolar amount injected at which a 50%  
inhibition was achieved (0.3-1.2 micromoles: cytochrome C,  
**ribonuclease**; 10.9 micromoles; spermine; 501-688 micromoles:  
L-arginine, **L-lysine**). The neutral myoglobin had  
no effect on **renal** lysozyme accumulation. The inhibitory  
potency appeared to increase with increasing molecular weight and pI  
value of the substance tested. Microperfusion experiments of  
proximal convoluted tubules of rat **kidney** revealed that  
luminal reabsorption of the basic lysozyme can be inhibited by the  
basic protein cytochrome C in a dose-dependent fashion. In these  
experiments the perfusion solution contained 57 micromol .1-1  
lysozyme, an intratubular lysozyme concentration at which the  
tubular lysozyme reabsorption was found to be about 80% saturated. A  
50% inhibition of the tubular endocytic lysozyme reabsorption was  
achieved a cytochrome C concentration of 102 micromol.1-1.

L28 ANSWER 3 OF 4 BIOSIS COPYRIGHT 2000 BIOSIS DUPLICATE 2  
ACCESSION NUMBER: 1977:227380 BIOSIS  
DOCUMENT NUMBER: BA64:49744  
TITLE: A RAT **KIDNEY** NEUTRAL PEPTIDASE THAT  
Searcher : Shears 308-4994

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DEGRADES B CHAIN OF INSULIN GLUCAGON AND ACTH  
PURIFICATION BY AFFINITY CHROMATOGRAPHY AND SOME  
PROPERTIES.

AUTHOR(S): VARANDANI P T; SHROYER L A  
SOURCE: ARCH BIOCHEM BIOPHYS, (1977) 181 (1), 82-93.  
CODEN: ABBIA4. ISSN: 0003-9861.

FILE SEGMENT: BA; OLD

LANGUAGE: Unavailable

AB A metallo-endopeptidase that catalyzes at near neutral pH the hydrolysis of certain polypeptides was purified from rat kidney microsomes by a simplified procedure using affinity chromatography on Sepharose 4B coupled with insulin B chain. The purified enzyme showed a single component by chromatography on diethylaminoethyl cellulose and by gel filtration on a Sephadex G-200 column. The native enzyme has a MW of approximately 213,000. Studies on its substrate specificity showed that the purified enzyme rapidly degrades insulin B chain, glucagon, ACTH, and, at a significantly lower rate, insulin A chain. The enzyme has a very weak or no activity toward RNase and vasopressin. The enzyme does not degrade denatured Hb, bovine serum albumin, insulin (nano- or micromolar), oxytocin, furylacryloylglycyl-leucine amide (FAGLA), synthetic substrates of cathepsin C (.beta.-naphthalamides of glycine-L-arginine and L-histidine-L-serine), or synthetic substrates of aminopeptidases (L-arginine- or L-glutamic acid-.beta.-naphthylamide). The enzyme degrades reduced or oxidized B chain at about the same rate, but S-sulfonated B chain is degraded at a markedly lower rate. The effect of several potential activators and inhibitors on the enzyme activity was investigated. Activity of the enzyme is markedly inhibited by chelating agents (EDTA and o-phenanthroline) and, modestly, by high concentrations of citrate and histidine. Activity of the enzyme is also markedly inhibited by simple thiol compounds (dithiothreitol, glutathione and mercaptoethanol), but not by sulfhydryl reagents (N-ethylmaleimide or iodoacetate). The inactive apoenzyme, prepared by treatment of the enzyme with EDTA followed by dialysis, was reactivated by Zn<sup>2+</sup> > Ca<sup>2+</sup>, minimally by Cu<sup>2+</sup>, but not by Hg<sup>2+</sup>. Some anions (phosphate, borate and bicarbonate) were strongly inhibitory, but Cl had no effect. The following agents had no effect: soybean and lima bean trypsin inhibitors, N.rho.-tosyl-L-phenylalanine chloromethyl ketone (TPCK), N.alpha.,.rho.-tosyl-L-lysine chloromethyl ketone (TLCK), aprotinin (Trasylol), phenylmethylsulfonyl fluoride (a serine protease inhibitor), 1-methyl histidine, 3-methyl histidine, histamine, imidazole and heparin.

L28 ANSWER 4 OF 4 EMBASE COPYRIGHT 2000 ELSEVIER SCI. B.V.

ACCESSION NUMBER: 74049754 EMBASE

DOCUMENT NUMBER: 1974049754

TITLE: Poly(rI) more important than poly(rC) in the  
Searcher : Shears 308-4994

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interferon induction process by poly(rI)-poly(rC).  
AUTHOR: De Clercq E.; Stewart II W.E.; De Somer P.  
CORPORATE SOURCE: Rega Inst. Med. Res., Univ. Leuven, Belgium  
SOURCE: Virology, (1973) 54/1 (278-282).  
CODEN: VIRLAX  
DOCUMENT TYPE: Journal  
FILE SEGMENT: 037 Drug Literature Index  
047 Virology  
030 Pharmacology  
LANGUAGE: English

AB A significantly greater interferon production has been obtained in primary rabbit kidney cell cultures exposed to poly(rI) followed by poly(rC) than in cell cultures exposed to poly(rC) followed by poly(rI). The interferon response in cell cultures exposed to poly(rI) followed by poly(rC) was markedly more resistant to poly l lysine and pancreatic ribonuclease treatment than was the interferon response in cell cultures exposed to poly(rC) followed by poly(rI). In addition, poly l lysine treatment removed a substantially greater proportion of cell associated radioactivity from cells exposed to [3H]poly(rC) followed by poly(rI) than from cells exposed to poly(rI) followed by [3H]poly(rC). These findings suggest that the poly(rI) poly(rC) complex is more tightly and efficiently bound to the cell (surface) when the homopolymers are added in the order poly(rI), poly(rC), than when they are added in the order poly(rC), poly(rI), and that it is more effectively attached to the cell receptor site by its poly(rI) strand than by its poly(rC) strand.

FILE 'USPATFULL' ENTERED AT 10:26:06 ON 09 MAY 2000

L1 ( 1)SEA FILE=REGISTRY ABB=ON PLU=ON D-LYSINE/CN  
L2 ( 2)SEA FILE=REGISTRY ABB=ON PLU=ON POLY-L-LYSINE/CN  
L3 3 SEA FILE=REGISTRY ABB=ON PLU=ON L1 OR L2  
L13 37 SEA FILE=USPATFULL ABB=ON PLU=ON (L3 OR (L OR D) (W) (LYS  
INE OR LYS)) (L) ((KIDNEY OR RENAL?) (5A) (UPTAK? OR  
RETENT?))  
L14 28 SEA FILE=USPATFULL ABB=ON PLU=ON L13 (L) ADMIN?  
L15 1 SEA FILE=REGISTRY ABB=ON PLU=ON ONCONASE/CN  
L16 215 SEA FILE=REGISTRY ABB=ON PLU=ON RIBONUCLEASE ?/CN  
L17 216 SEA FILE=REGISTRY ABB=ON PLU=ON L15 OR L16  
L22 31825 SEA FILE=CAPLUS ABB=ON PLU=ON L17 OR RIBONUCLEASE OR  
ONCONASE OR (RIBONUCLEIC OR RIBO NUCLEIC) (1W) BIND? (W) PROT  
EIN OR RNASE  
L31 641 SEA FILE=USPATFULL ABB=ON PLU=ON L22 (L) (L3 OR (D OR  
L) (W) (LYSINE OR LYS))  
L32 284 SEA FILE=USPATFULL ABB=ON PLU=ON L31 (L) (RENAL? OR  
KIDNEY)  
L33 91 SEA FILE=USPATFULL ABB=ON PLU=ON L32 (L) (ADMIN? (5A) (ORAL  
? OR MOUTH OR PER OS))  
L34 54 SEA FILE=USPATFULL ABB=ON PLU=ON L33 (L) (KD? OR KILOD?  
Searcher : Shears 308-4994

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OR KILO(W) (D OR DALT?))

L35 20 SEA FILE=USPATFULL ABB=ON PLU=ON L34(L) ISOTOP?  
L36 20 SEA FILE=USPATFULL ABB=ON PLU=ON L35 NOT L14

=> d 1-20 .bevpat

L36 ANSWER 1 OF 20 USPATFULL

ACCESSION NUMBER: 2000:18558 USPATFULL  
TITLE: Multidrug resistance proteins  
INVENTOR(S): Deeley, Roger G., Kingston, Canada  
Cole, Susan P. C., Kingston, Canada  
PATENT ASSIGNEE(S): Queen's University at Kingston, Kingston, Canada  
(non-U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 6025473	20000215
APPLICATION INFO.:	US 1995-461384	19950605 (8)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1995-407207, filed on 20 Mar 1995 which is a continuation-in-part of Ser. No. US 1993-141893, filed on 26 Oct 1993, now patented, Pat. No. US 5489519 which is a continuation-in-part of Ser. No. US 1993-29340, filed on 8 Mar 1993, now abandoned which is a continuation-in-part of Ser. No. US 1992-966923, filed on 27 Oct 1992, now abandoned	
DOCUMENT TYPE:	Utility	
PRIMARY EXAMINER:	Burke, Julie	
LEGAL REPRESENTATIVE:	Steeg, Carol Miernicki; Kara, Catherine J.; DeConti, Jr., Giulio A.	
NUMBER OF CLAIMS:	19	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	23 Drawing Figure(s); 21 Drawing Page(s)	
LINE COUNT:	4915	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A novel protein associated with multidrug resistance in living cells and capable of conferring multidrug resistance on a cell is disclosed. Nucleic acids encoding the novel multidrug resistance protein are also disclosed. Transformant cell lines which express the nucleic acid encoding the novel protein are also disclosed. Antibodies which bind the novel multidrug resistance protein are also disclosed. Diagnostic and treatment methods using the novel proteins, nucleic acids, antibodies and cell lines of the invention are also encompassed by the invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

INCL INCLM: 530/350.000

INCLS: 530/300.000; 530/395.000; 536/023.500; 514/012.000;

Searcher : Shears 308-4994

09/200791

435/183.000  
NCL NCLM: 530/350.000  
NCLS: 435/183.000; 530/300.000; 530/395.000; 536/023.500

L36 ANSWER 2 OF 20 USPATFULL

ACCESSION NUMBER: 2000:7057 USPATFULL  
TITLE: Transferrin receptor specific  
antibody-neuropharmaceutical or diagnostic agent  
conjugates  
INVENTOR(S): Friden, Phillip M., Bedford, MA, United States  
PATENT ASSIGNEE(S): Alkermes, Inc., Cambridge, MA, United States  
(U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 6015555	20000118
APPLICATION INFO.:	US 1995-444644	19950519 (8)
RELATED APPLN. INFO.:	Division of Ser. No. US 232246	
DOCUMENT TYPE:	Utility	
PRIMARY EXAMINER:	Burke, Julie	
LEGAL REPRESENTATIVE:	Hamilton, Brook, Smith & Reynolds, P.C.	
NUMBER OF CLAIMS:	6	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	79 Drawing Figure(s); 77 Drawing Page(s)	
LINE COUNT:	3966	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention pertains to a method for delivering a neuropharmaceutical or diagnostic agent across the blood brain barrier to the brain of a host. The method comprises administering to the host a therapeutically effective amount of an antibody-neuropharmaceutical or diagnostic agent conjugate wherein the antibody is reactive with a transferrin receptor and the antibody is a chimera between the variable region from one animal source and the constant region from a different animal source. Other aspects of this invention include a delivery system comprising an antibody reactive with a transferrin receptor linked to a neuropharmaceutical or diagnostic agent and methods for treating hosts afflicted with a disease associated with a neurological disorder.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

INCL INCLM: 424/133.100  
INCLS: 530/387.300; 530/388.220; 424/143.100; 435/007.210;  
435/069.600; 435/069.700; 435/328.000; 435/334.000  
NCL NCLM: 424/133.100  
NCLS: 424/143.100; 435/007.210; 435/069.600; 435/069.700;  
435/328.000; 435/334.000; 530/387.300; 530/388.220

L36 ANSWER 3 OF 20 USPATFULL

Searcher : Shears 308-4994

09/200791

ACCESSION NUMBER: 1999:170413 USPATFULL  
TITLE: Brain-associated inhibitor of tissue-type  
plasminogen activator  
INVENTOR(S): Hastings, Gregg A., Thousand Oaks, CA, United  
States  
Coleman, Timothy A., Gaithersburg, MD, United  
States  
Lawrence, Daniel A., Derwood, MD, United States  
Dillon, Patrick J., Carlsbad, CA, United States  
PATENT ASSIGNEE(S): Human Genome Sciences, Rockville, MD, United  
States (U.S. corporation)  
The American Red Cross, Falls Church, VA, United  
States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 6008020	19991228
APPLICATION INFO.:	US 1997-948997	19971010 (8)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1996-28117	19961011 (60)
DOCUMENT TYPE:	Utility	
PRIMARY EXAMINER:	Achutamurthy, Ponnathapura	
ASSISTANT EXAMINER:	Slobodyansky, Elizabeth	
LEGAL REPRESENTATIVE:	Wales, Michele M.	
NUMBER OF CLAIMS:	43	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	8 Drawing Figure(s); 10 Drawing Page(s)	
LINE COUNT:	3654	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to a novel BAIT protein which is a member of serpin superfamily which is expressed primarily in brain tissue. In particular, isolated nucleic acid molecules are provided encoding the human BAIT protein. BAIT polypeptides are also provided as are vectors, host cells and recombinant methods for producing the same. The invention further relates to screening methods for identifying agonists and antagonists of BAIT activity. Also provided are diagnostic methods for detecting nervous system-related disorders and therapeutic methods for treating nervous system-related disorders.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

INCL INCLM: 435/069.200  
INCLS: 435/069.700; 435/252.300; 435/320.100; 435/325.000;  
536/023.100; 536/023.500  
NCL NCLM: 435/069.200  
NCLS: 435/069.700; 435/252.300; 435/320.100; 435/325.000;  
536/023.100; 536/023.500

Searcher : Shears 308-4994



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L36 ANSWER 4 OF 20 USPATFULL

ACCESSION NUMBER: 1999:170407 USPATFULL  
TITLE: Method of making lipid metabolic pathway  
compositions  
INVENTOR(S): Gimeno, Carlos J., Boston, MA, United States  
Acton, Susan, Jamaica Plain, MA, United States  
PATENT ASSIGNEE(S): Millennium Pharmaceuticals, Inc., Cambridge, MA,  
United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 6008014	19991228
APPLICATION INFO.:	US 1996-707399	19960904 (8)
DOCUMENT TYPE:	Utility	
PRIMARY EXAMINER:	Burke, Julie	
LEGAL REPRESENTATIVE:	Lahive & Cockfield, LLP; Mandragouras, Amy E.	
NUMBER OF CLAIMS:	29	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	4 Drawing Figure(s); 4 Drawing Page(s)	
LINE COUNT:	4049	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to the discovery of novel genes encoding Lipid Metabolic Pathway (LMP) polypeptides. Therapeutics, diagnostics and screening assays based on these molecules are also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

INCL INCLM: 435/069.100  
INCLS: 435/091.100; 435/455.000; 435/325.000; 536/023.100  
NCL NCLM: 435/069.100  
NCLS: 435/091.100; 435/325.000; 435/455.000; 536/023.100

L36 ANSWER 5 OF 20 USPATFULL

ACCESSION NUMBER: 1999:163419 USPATFULL  
TITLE: Methods for identifying chemosensitizers  
INVENTOR(S): Deeley, Roger G., Kingston, Canada  
Cole, Susan P.C., Kingston, Canada  
PATENT ASSIGNEE(S): Queen's University at Kingston, Kingston, Canada  
(non-U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 6001563	19991214
APPLICATION INFO.:	US 1995-463179	19950605 (8)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1995-407207, filed on 20 Mar 1995 which is a continuation-in-part of Ser. No. US 1993-141893, filed on 26 Oct 1993, now patented, Pat. No. US Searcher : Shears 308-4994	

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5489519, issued on 6 Feb 1996 which is a continuation-in-part of Ser. No. US 1993-29340, filed on 8 Mar 1993, now abandoned which is a continuation-in-part of Ser. No. US 1992-966923, filed on 27 Oct 1992, now abandoned

DOCUMENT TYPE: Utility  
PRIMARY EXAMINER: Stanton, Brian R.  
ASSISTANT EXAMINER: Clark, Deborah J. R.  
LEGAL REPRESENTATIVE: Steeg, Carol Miernicki; Kara, Catherine J.; DeConti, Jr., Giulio A.  
NUMBER OF CLAIMS: 16  
EXEMPLARY CLAIM: 1,7  
NUMBER OF DRAWINGS: 13 Drawing Figure(s); 21 Drawing Page(s)  
LINE COUNT: 4885  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A novel protein associated with multidrug resistance in living cells and capable of conferring multidrug resistance on a cell is disclosed. Nucleic acids encoding the novel multidrug resistance protein are also disclosed. Transformant cell lines which express the nucleic acid encoding the novel protein are also disclosed. Antibodies which bind the novel multidrug resistance protein are also disclosed. Diagnostic and treatment methods using the novel proteins, nucleic acids, antibodies and cell lines of the invention are also encompassed by the invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

INCL INCLM: 435/006.000  
INCLS: 435/325.000; 435/006.000; 435/004.000; 435/029.000;  
800/002.000; 800/DIG.0014; 800/013.000; 424/009.100  
NCL NCLM: 435/006.000  
NCLS: 424/009.100; 435/004.000; 435/029.000; 435/325.000;  
800/013.000

L36 ANSWER 6 OF 20 USPATFULL

ACCESSION NUMBER: 1999:155454 USPATFULL  
TITLE: Trio molecules and uses related thereto  
INVENTOR(S): Streuli, Michel, Brookline, MA, United States  
Debant, Anne, Padres le Lez, France  
Serra-Pages, Carles, Boston, MA, United States  
PATENT ASSIGNEE(S): Dana-Farber Cancer Institute, Boston, MA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5994070	19991130
APPLICATION INFO.:	US 1997-826267	19970327 (8)

NUMBER	DATE
Searcher	: Shears 308-4994

09/200791

PRIORITY INFORMATION: US 1996-14214 19960327 (60)  
DOCUMENT TYPE: Utility  
PRIMARY EXAMINER: Campell, Bruce R.  
LEGAL REPRESENTATIVE: Lahive & Cockfield, LLP; Mandragouras, Amy E.;  
Williams, Megan E.  
NUMBER OF CLAIMS: 25  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 50 Drawing Figure(s); 27 Drawing Page(s)  
LINE COUNT: 4596

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Nucleic acids encoding TRIO proteins, the TRIO proteins themselves, and active portions thereof as described. In addition, antibodies immunoreactive with TRIO proteins, and preparations of such compositions are provided. Diagnostic and therapeutic assays and reagents for detecting and treating disorders involving, for example, aberrant expression (or loss thereof) of the TRIO protein are described. Assays are provided for identifying agents that modulate the biological function of TRIO proteins.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

INCL INCLM: 435/006.000  
INCLS: 435/069.100; 435/320.100; 435/325.000; 536/023.500;  
536/024.310  
NCL NCLM: 435/006.000  
NCLS: 435/069.100; 435/320.100; 435/325.000; 536/023.500;  
536/024.310

L36 ANSWER 7 OF 20 USPATFULL

ACCESSION NUMBER: 1999:146285 USPATFULL  
TITLE: Processes using a human serotonin receptor  
(5-HT.sub.4B)  
INVENTOR(S): Bard, Jonathan A., Wyckoff, NJ, United States  
Branchek, Theresa, Teaneck, NJ, United States  
Weinshank, Richard L., New York, NY, United States  
PATENT ASSIGNEE(S): Synaptic Pharmaceutical Corporation, Paramus,  
NJ, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5985585	19991116
	WO 9409828	19940511
APPLICATION INFO.:	US 1995-157185	19950615 (8)
	WO 1993-US10553	19931029
		19950615 PCT 371 date
		19950615 PCT 102(e) date
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1992-971690, filed on 3 Nov 1992, now abandoned And Ser. No. US 1994-281526, filed on 27 Jul 1994	
	Searcher	: Shears 308-4994

09/200791

DOCUMENT TYPE: Utility  
PRIMARY EXAMINER: Allen, Marianne P.  
LEGAL REPRESENTATIVE: White, John P.Cooper & Dunham LLP  
NUMBER OF CLAIMS: 12  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 12 Drawing Figure(s); 12 Drawing Page(s)  
LINE COUNT: 2704

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides for processes for identifying chemical compounds which specifically bind to a human 5-HT.sub.4B having the amino acid sequence of SEQ ID NO: 2.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

INCL INCLM: 435/007.210  
INCLS: 435/325.000; 435/356.000; 435/357.000; 435/358.000;  
435/365.000  
NCL NCLM: 435/007.210  
NCLS: 435/325.000; 435/356.000; 435/357.000; 435/358.000;  
435/365.000

L36 ANSWER 8 OF 20 USPATFULL

ACCESSION NUMBER: 1999:75310 USPATFULL  
TITLE: Methods of treating TNF.alpha.-mediated disease using chimeric anti-TNF antibodies  
INVENTOR(S): Le, Junming, Jackson Heights, NY, United States  
Vilcek, Jan, New York, NY, United States  
Dadonna, Peter, Palo Alto, CA, United States  
Ghrayeb, John, Thorndale, PA, United States  
Knight, David, Berwyn, PA, United States  
Seigal, Scott, Westborough, MA, United States  
PATENT ASSIGNEE(S): New York University, New York, NY, United States (U.S. corporation)  
Centocor, Inc., Malvern, PA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5919452	19990706
APPLICATION INFO.:	US 1994-192861	19940204 (8)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1993-10406, filed on 29 Jan 1993, now abandoned And Ser. No. US 1993-13413, filed on 2 Feb 1993, now abandoned which is a continuation-in-part of Ser. No. US 1992-943852, filed on 11 Sep 1992, now abandoned which is a continuation-in-part of Ser. No. US 1992-853606, filed on 18 Mar 1992, now abandoned which is a continuation-in-part of Ser. No. US 1991-670827, filed on 18 Mar 1991, now abandoned	
DOCUMENT TYPE:	Utility	
	Searcher	: Shears 308-4994

09/200791

PRIMARY EXAMINER: Scheiner, Toni R.  
ASSISTANT EXAMINER: Johnson, Nancy A.  
LEGAL REPRESENTATIVE: Hamilton, Brook, Smith & Reynolds, P.C.  
NUMBER OF CLAIMS: 13  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 48 Drawing Figure(s); 36 Drawing Page(s)  
LINE COUNT: 5351

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Treatment of tumor necrosis factor, TNF, mediated pathologies is provided by administering anti-TNF compounds, such as anti-TNF antibodies and anti-TNF peptides, which compounds are specific for tumor necrosis factor-.alpha. (TNF.alpha.) or tumor necrosis factor-.beta. (TNF.beta.) and which are useful for in vivo therapy or diagnosis of TNF.alpha.-mediated pathologies and conditions, wherein the anti-TNF compound is selected from the group consisting of at least one of an immunoglobulin variable region, a fragment of a TNF receptor and an anti-TNF peptide, such as a structural analog of a anti-TNF antibody fragment or a TNF receptor fragment.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

INCL INCLM: 424/133.100  
INCLS: 424/145.100; 424/158.100; 530/387.300; 530/388.230;  
530/389.200  
NCL NCLM: 424/133.100  
NCLS: 424/145.100; 424/158.100; 530/387.300; 530/388.230;  
530/389.200

L36 ANSWER 9 OF 20 USPATFULL

ACCESSION NUMBER: 1999:43471 USPATFULL  
TITLE: Methods for conferring multidrug resistance on a cell  
INVENTOR(S): Deeley, Roger G., Kingston, Canada  
Cole, Susan P. C., Kingston, Canada  
PATENT ASSIGNEE(S): Queen's University at Kingston, Kingston, Canada  
(non-U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5891724	19990406
APPLICATION INFO.:	US 1995-460907	19950605 (8)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1995-407207, filed on 20 Mar 1995 which is a continuation-in-part of Ser. No. US 1993-141893, filed on 26 Oct 1993, now patented, Pat. No. US 5489519, issued on 6 Feb 1996 which is a continuation-in-part of Ser. No. US 1993-29340, filed on 8 Mar 1993, now abandoned which is a continuation-in-part of Ser. No. US 1992-966923, Searcher : Shears 308-4994	

09/200791

filed on 27 Oct 1992, now abandoned

DOCUMENT TYPE: Utility  
PRIMARY EXAMINER: LaGuyader, John L.  
ASSISTANT EXAMINER: Schwartzman, Robert  
LEGAL REPRESENTATIVE: Steeg, Carol Mlernicki; Kara, Catherine J.;  
DeConti, Jr., Giulio A.  
NUMBER OF CLAIMS: 21  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 26 Drawing Figure(s); 21 Drawing Page(s)  
LINE COUNT: 4215

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A novel protein associated with multidrug resistance in living cells and capable of conferring multidrug resistance on a cell is disclosed. Nucleic acids encoding the novel multidrug resistance protein are also disclosed. Transformant cell lines which express the nucleic acid encoding the novel protein are also disclosed. Antibodies which bind the novel multidrug resistance protein are also disclosed. Diagnostic and treatment methods using the novel proteins, nucleic acids, antibodies and cell lines of the invention are also encompassed by the invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

INCL INCLM: 435/375.000  
INCLS: 435/006.000; 435/069.100; 435/172.300; 435/320.100;  
435/325.000; 435/367.000; 536/023.100; 536/023.500  
NCL NCLM: 435/375.000  
NCLS: 435/006.000; 435/069.100; 435/320.100; 435/325.000;  
435/367.000; 435/456.000; 536/023.100; 536/023.500

L36 ANSWER 10 OF 20 USPATFULL

ACCESSION NUMBER: 1999:43412 USPATFULL  
TITLE: Vectors and methods for recombinant production of uPA-binding fragments of the human urokinase-type plasminogen receptor (uPAR)  
INVENTOR(S): Dan.o slashed. , Keld, Charlottenlund, Denmark  
Blasi, Francesco, Charlottenlund, Denmark  
Roldan, Ann Louring, Vallensb.ae butted.k, Denmark  
Cubellis, Maria Vittoria, Napoli, Italy  
Masucci, Maria Teresa, Napoli, Italy  
Appella, Ettore, Chevy Chase, MD, United States  
Schleuning, Wolf-Dieter, Berlin, Germany, Federal Republic of  
Behrendt, Niels, Bagsv.ae butted.rd, Denmark  
R.o slashed.nne, Ebbe, Copenhagen, Denmark  
Kristensen, Peter, Copenhagen, Denmark  
Pollanen, Jari, Espoo, Finland  
Salonen, Eeva-Marjatta, Espoo, Finland  
Stephens, Ross W., Helsinki, Finland  
Searcher : Shears 308-4994

09/200791

Tapiovaara, Hannele, Helsinki, Finland  
Vaheiri, Antti, Kauniainen, Finland  
M.o slashed.ller, Lisbeth Birk, Bagsv.ae  
butted.rd, Denmark  
Ellis, Vincent, Copenhagen, Denmark  
Lund, Leif R.o slashed.ge, Copenhagen, Denmark  
Ploug, Michael, Copenhagen, Denmark  
Pyke, Charles, S.o slashed.borg, Denmark  
Patthy, Laszlo, Budapest, Hungary  
PATENT ASSIGNEE(S): Cancerforskningsfondet af 1989, Copenhagen K,  
Denmark (non-U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5891664	19990406
APPLICATION INFO.:	US 1994-319052	19941006 (8)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1991-824189, filed on 6 Dec 1991, now abandoned which is a continuation-in-part of Ser. No. US 1989-374854, filed on 3 Jul 1989, now abandoned which is a continuation-in-part of Ser. No. US 1989-334613, filed on 7 Apr 1989, now abandoned	
DOCUMENT TYPE:	Utility	
PRIMARY EXAMINER:	Walsh, Stephen G.	
ASSISTANT EXAMINER:	Fitzgerald, David L.	
LEGAL REPRESENTATIVE:	Cooper, Iver P.	
NUMBER OF CLAIMS:	22	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	83 Drawing Figure(s); 53 Drawing Page(s)	
LINE COUNT:	6449	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Activation of plasminogen to plasma is inhibited by preventing the binding of a receptor binding form of urokinase-type plasminogen activator to a urokinase-type plasminogen activator receptor in a mammal, thereby preventing the urokinase-type plasminogen activator from converting plasminogen into plasmin. DNA fragments which encode for soluble, active fragments of the urokinase-type plasminogen activator are provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

INCL INCLM: 435/069.100  
INCLS: 435/320.100; 435/069.700; 536/023.500  
NCL NCLM: 435/069.100  
NCLS: 435/069.700; 435/320.100; 536/023.500

L36 ANSWER 11 OF 20 USPATFULL

ACCESSION NUMBER: 1999:36949 USPATFULL  
TITLE: Engineering oral tissues  
INVENTOR(S): Mooney, David J., Ann Arbor, MI, United States  
Searcher : Shears 308-4994

09/200791

PATENT ASSIGNEE(S): Rutherford, Robert B., Ann Arbor, MI, United States  
The Regents of the University of Michigan, Ann Arbor, MI, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5885829	19990323
APPLICATION INFO.:	US 1997-864494	19970528 (8)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1996-18450	19960528 (60)
DOCUMENT TYPE:	Utility	
PRIMARY EXAMINER:	Degen, Nancy	
LEGAL REPRESENTATIVE:	Arnold, White & Durkee	
NUMBER OF CLAIMS:	109	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	17 Drawing Figure(s); 11 Drawing Page(s)	
LINE COUNT:	8001	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed are methods for regenerating dental and oral tissues from viable cells using ex vivo culture on a structural matrix. The regenerated oral tissues and tissue-matrix preparations thus provided have both clinical applications in dentistry and oral medicine and are also useful in in vitro toxicity and biocompatibility testing.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

INCL INCLM: 435/325.000  
INCLS: 424/049.000; 424/422.000; 424/435.000; 435/069.500;  
435/374.000; 435/378.000  
NCL NCLM: 435/325.000  
NCLS: 424/049.000; 424/422.000; 424/435.000; 435/069.100;  
435/374.000; 435/378.000

L36 ANSWER 12 OF 20 USPATFULL

ACCESSION NUMBER: 1999:33784 USPATFULL  
TITLE: Methods for identifying multidrug resistant tumor cells  
INVENTOR(S): Deeley, Roger G., Kingston, Canada  
Cole, Susan P. C., Kingston, Canada  
PATENT ASSIGNEE(S): Queen's University at Kingston, Kingston, Canada  
(non-U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5882875	19990316
APPLICATION INFO.:	US 1995-462109	19950605 (8)
	Searcher :	Shears 308-4994



09/200791

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1995-407207, filed on 20 Mar 1995 which is a continuation-in-part of Ser. No. US 1993-141893, filed on 26 Oct 1993, now patented, Pat. No. US 5489519, issued on 6 Feb 1996 which is a continuation-in-part of Ser. No. US 1993-29340, filed on 8 Mar 1993, now abandoned which is a continuation-in-part of Ser. No. US 1992-966923, filed on 27 Oct 1992, now abandoned

DOCUMENT TYPE: Utility  
PRIMARY EXAMINER: Huff, Sheela  
ASSISTANT EXAMINER: Reeves, Julie E  
LEGAL REPRESENTATIVE: Steeg, Carol Miernicki; Kara, Catherine J.; DeConti, Jr., Giulio A.

NUMBER OF CLAIMS: 17  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 26 Drawing Figure(s); 21 Drawing Page(s)  
LINE COUNT: 4149

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A novel protein associated with multidrug resistance in living cells and capable of conferring multidrug resistance on a cell is disclosed. Nucleic acids encoding the novel multidrug resistance protein are also disclosed. Transformant cell lines which express the nucleic acid encoding the novel protein are also disclosed. Antibodies which bind the novel multidrug resistance protein are also disclosed. Diagnostic and treatment methods using the novel proteins, nucleic acids, antibodies and cell lines of the invention are also encompassed by the invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

INCL INCLM: 435/007.230  
INCLS: 424/155.100; 530/388.800  
NCL NCLM: 435/007.230  
NCLS: 424/155.100; 530/388.800

L36 ANSWER 13 OF 20 USPATFULL

ACCESSION NUMBER: 1999:12769 USPATFULL  
TITLE: Nucleic acid encoding novel receptor-type phosphotyrosine phosphatase-.kappa.  
INVENTOR(S): Schlessinger, Joseph, New York, NY, United States  
Sap, Jan M., New York, NY, United States  
Ullrich, Axel, Munchen, Germany, Federal Republic of  
Vogel, Wolfgang, Germering, Germany, Federal Republic of  
Fuchs, Miriam, Starnberg, Germany, Federal Republic of  
PATENT ASSIGNEE(S): Max Planck Gessellschaft, Gottingen, Germany,  
Federal Republic of (non-U.S. corporation)  
Searcher : Shears 308-4994

09/200791

New York University Medical Center, New York, NY,  
United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5863755	19990126
APPLICATION INFO.:	US 1993-87244	19930701 (8)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1993-49384, filed on 21 Apr 1993, now abandoned	
DOCUMENT TYPE:	Utility	
PRIMARY EXAMINER:	Teng, Sally	
LEGAL REPRESENTATIVE:	Pennie & Edmonds LLP	
NUMBER OF CLAIMS:	19	
EXEMPLARY CLAIM:	4	
NUMBER OF DRAWINGS:	49 Drawing Figure(s); 37 Drawing Page(s)	
LINE COUNT:	3616	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A novel receptor-type protein tyrosine phosphatase-.kappa.  
(RPTP.kappa.) protein or glycoprotein and the DNA coding therefor  
is expressed in a wide variety of mammalian tissues. The  
RPTP.kappa. protein or glycoprotein may be produced by recombinant  
means. Antibodies to the protein, methods for measuring the  
quantity of the protein, methods for screening compounds, such as  
drugs, which can bind to the protein and inhibit or stimulate  
their enzymatic activity, are provided. Further, methods for  
inhibiting homophilic binding of Type II RPTP, especially  
RPTP.kappa. molecules are provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

INCL INCLM: 435/069.100  
INCLS: 435/252.300; 435/254.110; 435/320.100; 435/325.000;  
435/196.000; 536/023.500; 536/024.310

NCL NCLM: 435/069.100  
NCLS: 435/196.000; 435/252.300; 435/254.110; 435/320.100;  
435/325.000; 536/023.500; 536/024.310

L36 ANSWER 14 OF 20 USPATFULL

ACCESSION NUMBER: 1999:1500 USPATFULL

TITLE: Receptor-type phosphotyrosine phosphatase-.kappa.

INVENTOR(S): Schlessinger, Joseph, New York, NY, United States  
Sap, Jan M., New York, NY, United States  
Ullrich, Axel, Munchen, Germany, Federal Republic  
of  
Vogel, Wolfgang, Germering, Germany, Federal  
Republic of  
Fuchs, Miriam, Starnberg, Germany, Federal  
Republic of

PATENT ASSIGNEE(S): New York University Medical Center, New York, NY,  
United States (U.S. corporation)

Searcher : Shears 308-4994

09/200791

	NUMBER	DATE
PATENT INFORMATION:	US 5856162	19990105
APPLICATION INFO.:	US 1995-449644	19950524 (8)
RELATED APPLN. INFO.:	Division of Ser. No. US 1993-87244, filed on 1 Jul 1993 which is a continuation-in-part of Ser. No. US 1993-49384, filed on 21 Apr 1993, now abandoned	
DOCUMENT TYPE:	Utility	
PRIMARY EXAMINER:	Teng, Sally P.	
LEGAL REPRESENTATIVE:	Pennie & Edmonds LLP	
NUMBER OF CLAIMS:	10	
EXEMPLARY CLAIM:	2,4	
NUMBER OF DRAWINGS:	49 Drawing Figure(s); 37 Drawing Page(s)	
LINE COUNT:	3605	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A novel receptor-type protein tyrosine phosphatase-.kappa. (RPTP.kappa.) protein or glycoprotein and the DNA coding therefor is expressed in a wide variety of mammalian tissues. The RPTP.kappa. protein or glycoprotein may be produced by recombinant means. Antibodies to the protein, methods for measuring the quantity of the protein, methods for screening compounds, such as drugs, which can bind to the protein and inhibit or stimulate their enzymatic activity, are provided. Further, methods for inhibiting homophilic binding of Type II RPTP, especially RPTP.kappa. molecules are provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

INCL INCLM: 435/196.000  
INCLS: 435/069.100; 435/069.700; 536/023.500; 530/350.000  
NCL NCLM: 435/196.000  
NCLS: 435/069.100; 435/069.700; 530/350.000; 536/023.500

L36 ANSWER 15 OF 20 USPATFULL

ACCESSION NUMBER: 1998:115581 USPATFULL  
TITLE: Hybrid immunoglobulin-thrombolytic enzyme molecules which specifically bind a thrombus, and methods of their production and use  
INVENTOR(S): Quertermous, Thomas, Nashville, TN, United States  
Runge, Marschall Stevens, Atlanta, GA, United States  
Haber, Edgar, Salisbury, NH, United States  
PATENT ASSIGNEE(S): The General Hospital Corporation, Boston, MA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5811265	19980922
	Searcher :	Shears 308-4994

09/200791

APPLICATION INFO.: US 0961736 19930726 (8)  
RELATED APPLN. INFO.: Continuation-in-part of Ser. No. 2861, filed  
on 15 Jan 1993, now abandoned And a  
continuation-in-part of Ser. No. 589435, filed  
on 27 Sep 1990, now abandoned which is a  
continuation-in-part of Ser. No. 435485, filed  
on 7 Jul 1989, now abandoned , said Ser. No.  
2861 which is a continuation of Ser. No.  
234051, filed on 19 Aug 1988, now abandoned  
DOCUMENT TYPE: Utility  
PRIMARY EXAMINER: Nucker, Christine M.  
ASSISTANT EXAMINER: Scheiner, Laurie  
LEGAL REPRESENTATIVE: Sterne, Kessler, Goldstein & Fox P.L.L.C.  
NUMBER OF CLAIMS: 6  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 31 Drawing Figure(s); 33 Drawing Page(s)  
LINE COUNT: 4098

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Hybrid immunoglobulin-enzyme molecules are provided which are  
composed of antibodies, or derivatives or fragments thereof, which  
specifically bind an arterial or venous thrombus that are operably  
linked to the enzymatically active portions of thrombolytic  
enzymes such as plasminogen activators. In a preferred embodiment  
the hybrid molecules specifically bind to fibrin and have  
fibrinolytic activity. The hybrid molecules of the present  
invention may be produced by any means, including chemical  
conjugation, or by means of recombinant DNA, genetic engineering  
and/or hybridoma technology. Methods for making and using the  
molecules in diagnosis and therapy are also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

INCL INCLM: 435/069.300  
INCLS: 435/172.200; 435/172.300; 435/252.300; 536/023.400;  
536/023.530  
NCL NCLM: 435/069.300  
NCLS: 435/252.300; 536/023.400; 536/023.530

L36 ANSWER 16 OF 20 USPATFULL

ACCESSION NUMBER: 1998:68805 USPATFULL  
TITLE: Isolated nucleic acid molecules encoding  
multidrug resistance proteins  
INVENTOR(S): Deeley, Roger G., Kingston, Canada  
Cole, Susan P.C., Kingston, Canada  
PATENT ASSIGNEE(S): Queen's University at Kingston, Kingston, Canada  
(non-U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5766880	19980616
	Searcher	: Shears 308-4994

09/200791

APPLICATION INFO.: US 1995-463092 19950605 (8)  
RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1995-407207,  
filed on 20 Mar 1995 which is a  
continuation-in-part of Ser. No. US 1993-141893,  
filed on 26 Oct 1993, now patented, Pat. No. US  
5489519, issued on 6 Feb 1996 which is a  
continuation-in-part of Ser. No. US 1993-29340,  
filed on 8 Mar 1993, now abandoned which is a  
continuation-in-part of Ser. No. US 1992-966923,  
filed on 27 Oct 1992, now abandoned  
DOCUMENT TYPE: Utility  
PRIMARY EXAMINER: Elliott, George C.  
ASSISTANT EXAMINER: Schwarteman, Robert  
LEGAL REPRESENTATIVE: Steeg, Carol Miernicki; Kara, Catherine J.;  
DeConti, Jr., Giulio A.  
NUMBER OF CLAIMS: 16  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 30 Drawing Figure(s); 21 Drawing Page(s)  
LINE COUNT: 3632  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A novel protein associated with multidrug resistance in living  
cells and capable of conferring multidrug resistance on a cell is  
disclosed. Nucleic acids encoding the novel multidrug resistance  
protein are also disclosed. Transformant cell lines which express  
the nucleic acid encoding the novel protein are also disclosed.  
Antibodies which bind the novel multidrug resistance protein are  
also disclosed. Diagnostic and treatment methods using the novel  
proteins, nucleic acids, antibodies and cell lines of the  
invention are also encompassed by the invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

INCL INCLM: 435/069.100  
INCLS: 435/243.000; 435/320.100; 435/366.000; 435/372.000;  
536/023.500; 536/024.310  
NCL NCLM: 435/069.100  
NCLS: 435/243.000; 435/320.100; 435/366.000; 435/372.000;  
536/023.500; 536/024.310

L36 ANSWER 17 OF 20 USPATFULL

ACCESSION NUMBER: 97:117693 USPATFULL  
TITLE: Methods of treating rheumatoid arthritis using  
chimeric anti-TNF antibodies  
INVENTOR(S): Le, Junming, Jackson Heights, NY, United States  
Vilcek, Jan, New York, NY, United States  
Daddona, Peter, Menlo Park, CA, United States  
Ghrayeb, John, Thorndale, PA, United States  
Knight, David, Berwyn, PA, United States  
Siegel, Scott, Westborough, MA, United States  
PATENT ASSIGNEE(S): New York University Medical Center, New York, NY,  
Searcher : Shears 308-4994

09/200791

United States (U.S. corporation)  
Centocor, Inc., Malvern, PA, United States (U.S.  
corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5698195	19971216
APPLICATION INFO.:	US 1994-324799	19941018 (8)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1994-192102, filed on 4 Feb 1994 Ser. No. Ser. No. US 1994-192061, filed on 4 Feb 1994, now abandoned And Ser. No. US 1994-192093, filed on 4 Feb 1994, now abandoned , each Ser. No. US - which is a continuation-in-part of Ser. No. US 1993-10406, filed on 29 Jan 1993, now abandoned And Ser. No. US 1993-13413, filed on 2 Feb 1993, now abandoned which is a continuation-in-part of Ser. No. US 1992-943852, filed on 11 Sep 1992, now abandoned which is a continuation-in-part of Ser. No. US 1992-853606, filed on 18 Mar 1992, now abandoned which is a continuation-in-part of Ser. No. US 1991-670827, filed on 18 Mar 1991, now abandoned	
DOCUMENT TYPE:	Utility	
PRIMARY EXAMINER:	Feisee, Lila	
ASSISTANT EXAMINER:	Lucas, John	
LEGAL REPRESENTATIVE:	Hamilton, Brook, Smith & Reynolds, P.C.	
NUMBER OF CLAIMS:	16	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	33 Drawing Figure(s); 36 Drawing Page(s)	
LINE COUNT:	5887	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Anti-TNF antibodies, fragments and regions thereof which are  
specific for human tumor necrosis factor-.alpha. (TNF.alpha.) and  
are useful in vivo for diagnosis and therapy of a number of  
TNF.alpha.-mediated pathologies and conditions, including  
rheumatoid arthritis as well as polynucleotides coding for murine  
and chimeric antibodies, methods of producing the antibody,  
methods of use of the anti-TNF antibody, or fragment, region or  
derivative thereof, in immunoassays and immunotherapeutic  
approaches are provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

INCL INCLM: 424/133.100  
INCLS: 424/141.100; 424/145.100; 424/192.100; 514/825.000;  
530/387.300; 530/388.100; 530/388.230; 530/351.000  
NCL NCLM: 424/133.100  
NCLS: 424/141.100; 424/142.100; 424/145.100; 514/825.000;  
530/351.000; 530/387.300; 530/388.100; 530/388.230

Searcher : Shears 308-4994

09/200791

L36 ANSWER 18 OF 20 USPATFULL

ACCESSION NUMBER: 97:70718 USPATFULL

TITLE: Methods of treating TNF-.alpha.-mediated Crohn's disease using chimeric anti-TNF antibodies

INVENTOR(S): Le, Junming, Jackson Heights, NY, United States  
Vilcek, Jan, New York, NY, United States  
Dadonna, Peter, Palo Alto, CA, United States  
Ghrayeb, John, Thorndale, PA, United States  
Knight, David, Berwyn, PA, United States

PATENT ASSIGNEE(S): Siegel, Scott A., Westborough, MA, United States  
New York University Medical Center, New York, NY, United States (U.S. corporation)  
Centocor, Inc., Malvern, PA, United States (U.S. corporation)

NUMBER DATE

PATENT INFORMATION: US 5656272 19970812

APPLICATION INFO.: US 1994-192102 19940204 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1993-10406, filed on 26 Jan 1993, now abandoned And Ser. No. US 1993-13413, filed on 2 Feb 1993, now abandoned which is a continuation-in-part of Ser. No. US 1992-943852, filed on 11 Sep 1992, now abandoned which is a continuation-in-part of Ser. No. US 1992-853606, filed on 18 Mar 1992, now abandoned which is a continuation-in-part of Ser. No. US 1991-670827, filed on 18 Mar 1991, now abandoned

DOCUMENT TYPE: Utility

PRIMARY EXAMINER: Feisee, Lila

ASSISTANT EXAMINER: Lucas, John

LEGAL REPRESENTATIVE: Hamilton, Brook, Smith & Reynolds, P.C.

NUMBER OF CLAIMS: 7

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 48 Drawing Figure(s); 36 Drawing Page(s)

LINE COUNT: 5251

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Anti-TNF antibodies, fragments and regions thereof which are specific for human tumor necrosis factor-.alpha. (TNF.alpha.) and are useful in vivo for diagnosis and therapy of a number of TNF.alpha.-mediated pathologies and conditions, including Crohn's disease, as well as polynucleotides coding for murine and chimeric antibodies, methods of producing the antibody, methods of use of the anti-TNF antibody, or fragment, region or derivative thereof, in immunoassays and immunotherapeutic approaches are provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

INCL INCLM: 424/133.100

INCLS: 424/145.100; 424/139.100; 435/069.100; 435/069.600;

Searcher : Shears 308-4994

09/200791

NCL            435/069.700; 530/387.300; 530/388.230  
NCLM: 424/133.100  
NCLS: 424/139.100; 424/145.100; 435/069.100; 435/069.600;  
435/069.700; 530/387.300; 530/388.230

L36 ANSWER 19 OF 20 USPATFULL

ACCESSION NUMBER: 97:20243 USPATFULL  
TITLE: Hybrid immunoglobulin-thrombolytic enzyme  
          molecules which specifically bind a thrombus, and  
          methods of their production and use  
INVENTOR(S): Quertermous, Thomas, Nashville, TN, United States  
              Runge, Marschall S., Atlanta, GA, United States  
              Haber, Edgar, Salisbury, NH, United States  
PATENT ASSIGNEE(S): The General Hospital Corporation, Boston, MA,  
                      United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5609869	19970311
APPLICATION INFO.:	US 1995-453779	19950530 (8)
RELATED APPLN. INFO.:	Division of Ser. No. US 1993-96173, filed on 26 Jul 1993 which is a continuation-in-part of Ser. No. US 1993-2861, filed on 15 Jan 1993 And Ser. No. US 1990-589435, filed on 27 Sep 1990 which is a continuation-in-part of Ser. No. US 1989-435485, filed on 7 Jul 1989, now abandoned , said Ser. No. US -2861 which is a continuation of Ser. No. US 1988-234051, filed on 19 Aug 1988, now abandoned	
DOCUMENT TYPE:	Utility	
PRIMARY EXAMINER:	Nucker, Christine M.	
ASSISTANT EXAMINER:	Scheiner, Laurie	
LEGAL REPRESENTATIVE:	Sterne, Kessler, Goldstein & Fox, P.L.L.C.	
NUMBER OF CLAIMS:	5	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	37 Drawing Figure(s); 33 Drawing Page(s)	
LINE COUNT:	3876	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB    Hybrid immunoglobulin-enzyme molecules are provided which are  
      composed of antibodies, or derivatives or fragments thereof, which  
      specifically bind an arterial or venous thrombus that are operably  
      linked to the enzymatically active portions of thrombolytic  
      enzymes such as plasminogen activators. In a preferred embodiment  
      the hybrid molecules specifically bind to fibrin and have  
      fibrinolytic activity. The hybrid molecules of the present  
      invention may be produced by any means, including chemical  
      conjugation, or by means of recombinant DNA, genetic engineering  
      and/or hybridoma technology. Methods for making and using the  
      molecules in diagnosis and therapy are also disclosed.

Searcher : Shears 308-4994



09/200791

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

INCL INCLM: 424/133.100  
INCLS: 424/134.100; 424/136.100; 424/139.100; 424/178.100;  
424/192.100; 435/069.300; 435/252.300; 435/172.200;  
435/172.300; 530/387.300; 530/388.250; 530/389.300;  
536/023.400; 536/023.530  
NCL NCLM: 424/133.100  
NCLS: 424/134.100; 424/136.100; 424/139.100; 424/178.100;  
424/192.100; 435/069.300; 435/252.300; 530/387.300;  
530/388.250; 530/389.300; 536/023.400; 536/023.530

L36 ANSWER 20 OF 20 USPATFULL

ACCESSION NUMBER: 96:101563 USPATFULL  
TITLE: Method of inducing gene expression by ionizing  
radiation  
INVENTOR(S): Ohno, Tsuneya, Boston, MA, United States  
Weichselbaum, Ralph R., Chicago, IL, United  
States  
Kufe, Donald W., Wellesley, MA, United States  
PATENT ASSIGNEE(S): Arch Development Corporation, Chicago, IL, United  
States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5571797	19961105
APPLICATION INFO.:	US 1994-241863	19940511 (8)
DOCUMENT TYPE:	Utility	
PRIMARY EXAMINER:	Campell, Bruce R.	
LEGAL REPRESENTATIVE:	Arnold White & Durkee	
NUMBER OF CLAIMS:	16	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	3 Drawing Figure(s); 3 Drawing Page(s)	
LINE COUNT:	3580	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides a method for delivering ionizing radiation to specific tissues, resulting in the activation of a DNA molecule comprising a radiation responsive enhancer-promoter operatively linked to an encoding region that encodes at least one polypeptide. The radiation source may be will generally be in the form of a radionuclide, capable of gamma or beta emissions. Processes for regulating polypeptide expression and inhibiting tumor growth using such DNA molecules are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

INCL INCLM: 514/044.000  
INCLS: 424/001.110; 424/001.490; 424/001.610; 424/001.650;  
424/001.690; 424/450.000; 424/093.200; 424/093.210;  
435/172.300; 435/320.100; 435/069.100; 435/069.500;  
Searcher : Shears 308-4994